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ABSTRACT

Part of the Master Curriculum Guide Project, the document presents strategies for teaching economic concepts as related to basic business and consumer education in secondary schools. The objective is to provide detailed classroom lessons illustrating ways economic ideas can be taught at differing levels of difficulty. The 18 lessons are concept-based and can be modified for use in existing curriculum. They seek to develop economic literacy from the standpoint of the ways economic concepts are used in the decision-making processes of consumers and business managers, and how these decisions affect individuals as wage earners and citizens. Procedures such as group discussion, case study, comparison, analysis, simulation, systematic decision making, and evaluation are suggested. Sample lessons are entitled: "Consumer Marketplace Decisions," "Competing for the Consumer's Dollar," "Mass Markets, Advertising, and the Product Cycle," "Market Simulation-The Big Apple," "An Evaluation of Income Tax Provisions," and "Shaping the Budget of a Local Government." Title, time required, recommended grade level, major and related concepts, instructional objectives, rationale, materials needed, teaching procedures, evaluation, and student handout sheets are listed for each lesson. A glossary of concepts is appended, covering basic economic concepts, economic systems, problems, microeconomics, macroeconomics, the world economy, economic institutions, and measurement concepts. A bibliography suggesting supplementary materials and sources of information concludes the document. (CK)

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Master Curriculum Guide in Economics for the Nation's Schools

SO 011 920

Part II

# Strategies for Teaching Economics:

## Basic Business and Consumer Education (Secondary)

James F. Niss, *Chairman*
Judith Staley Brenneke
John E. Clow

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# Foreword

The *Master Curriculum Guide* was published to be used as a tool for curriculum development—it is not a curriculum per se. It is designed as a resource document for school systems engaged in K–12 economic education curriculum development. Part I provides a framework for teaching economic ideas and Part II provides detailed classroom lessons illustrating useful ways in which these ideas can be taught at different levels of difficulty. Thus, the *Master Curriculum Guide* indicates what economic ideas can be taught, where they can be taught, and how they can be taught.

It was decided to slice the school years into three segments: primary, intermediate, and secondary—with the secondary packets oriented toward subject fields. Curriculum committees were established for these segments. Teachers must decide the appropriate grade for each lesson based upon the capacity of their students. Those teaching in "middle schools" will want to examine both the intermediate-level package and the various secondary packages.

By judiciously selecting lessons from the volumes of teaching strategies, teachers can systematically upgrade the quantity and quality of economics instruction in their existing courses. Each lesson is self-contained and ready for teaching, but good teachers who have had economic education training can readily modify the activity to fit their special classroom needs. The lessons are concept-based rather than unit or theme-oriented. Once teachers have mastered the instructional activity, placement within existing courses or inclusion as supplements to text units will rapidly follow. Sample materials for classroom use (e.g., pictures, cards, games, etc.) may be reproduced at the teacher's discretion.

The curriculum strategies published in this volume have not been classroom-tested. For this reason, we see the present edition as a working document that will be improved on the basis of responses from users throughout the country. The Instructional Activity Evaluation Form (shown on pages 9-10) or modified versions of it, may be used by supervisors to obtain feedback from teachers. We urge teachers to send copies of such evaluations to the Joint Council. This will enable us to obtain insights for future revisions. Furthermore, since we view these collections of concept-oriented curriculum activities as starting points, teachers are urged to submit their own activities dealing with concepts selected from Part I, the *Framework*. Those teachers wishing to submit activities should use a format that includes the essential elements of the format outlined on page 11. This guide was developed to encourage writers to provide immediately teachable lessons. If the Joint Council receives a sufficient number of activities that have been classroom-tested, it will be well on its way toward supplying multiple volumes of conceptually oriented lessons at various grade levels. In fact, it would have a growing "curriculum activities bank" which, when published, would provide teachers with a rich source of classroom-tested lessons designed to teach various components of the economics framework.

The Master Curriculum Guide Project, like all complex undertakings, is the product of many people whose contributions must remain unacknowledged, because it is nearly impossible to assign authorship to ideas that have been shaped and reshaped as they were molded into a published document. Perhaps by briefly tracing the evolutionary character of the product, we can not only clarify its purpose but also give credit to some of the principals involved.

The Master Curriculum Guide Project is an outgrowth of the Developmental Economic Education Project (DEEP). Working documents produced for the DEEP experiment in curriculum change conducted between 1964 and 1969 included the "two little red books," as they were called in the field: one a statement of economic concepts to be taught as outlined in the *Task Force Report on Economic Education in the Schools*, and the second, some suggestions for grade placement. These materials were later fashioned into a single volume entitled *Economics in the Curriculum*. During the 1960s and the early 1970s, these

publications were extensively used, especially by those schools associated with the DEEP Cooperating Schools Program. Literally hundreds of curriculum guides and lesson plans were generated from these documents and through them thousands of teachers and students were introduced to economic education.

During the 1973 meetings of the National Association of Affiliated Economic Education Directors, many Council and Center directors, led by the California and Oklahoma contingents, urged the Joint Council to undertake what has become known as the Master Curriculum Guide Project. It took three years for W. Lee Hansen's committee to develop *A Framework for Teaching Economics*. At the same time that the *Framework* was being prepared, curriculum task force groups were established, chaired by the individuals whose names appear on these published volumes. Behind the scenes, the project relied heavily on a steering committee of professional economic educators: Peter V. Harrington, director, Indiana Council for Economic Education, Purdue University; Hugh G. Lovell, professor of economics, Portland State University; Clayton Millington, executive vice president, Oklahoma Council on Economic Education, Oklahoma State University; Leon M. Schur, director, Center for Economic Education, University of Wisconsin-Milwaukee; Roman F. Warmke, chairman, Department of Economic Education, Ohio University.

These individuals served in an advisory capacity for various project committees and significantly helped to shape the product. June V. Gilliard, director of curriculum for the Joint Council, contributed importantly to the design of the teaching strategies and prepared the Instructional Activity Evaluation Form. Each committee was given the responsibility to make a first selection of those economic concepts that could be most usefully taught within the grade level and subject area established. We know that more ideas than are included in these volumes *can* be taught. Our objective for these first editions was to produce a few quality activities that could be immediately used by teachers.

We are indebted to all individuals who have participated in the preparation of *Strategies for Teaching Economics: Basic Business and Consumer Education*, but special thanks are due to James Niss, Judith Brenneke and John Clow. Through their leadership, we have good teaching models that will serve to accelerate concept learning in economics.

S. Stowell Symmes
*Director of School Services*
*Coordinator, Master Curriculum Project*

# Preface

*Strategies for Teaching Economics* is one component of a two-part publication entitled *Master Curriculum Guide in Economics for the Nation's Schools*. Part I of the guide, *A Framework for Teaching Economics: Basic Concepts*, presents a conceptual structure of economics and shows how that structure can be used to assist in more effective personal economic decision-making. Part II, *Strategies for Teaching Economics*, demonstrates to educators how the conceptual *Framework* can be taught at various grade levels: primary, intermediate, and secondary. It is published as several volumes to allow more flexible use by classroom teachers and curriculum development specialists.

The Joint Council greatly appreciates the fine cooperation given to us by the many universities and school systems associated with the development of these curriculum strategies. We are especially indebted to the individuals who drafted the materials. While no claim is made that these lessons have been evaluated under all classroom conditions, it is expected that the lessons will work with the pupil populations designated. We consider the present volume as a working document and expect that revised editions will be forthcoming in the years ahead.

The entire Master Curriculum Project was made possible by generous contributions from all our many dedicated sponsors. In addition, supplementary grants were received from General Motors, Ford Motor Car Fund, and American Telephone and Telegraph. We appreciate the confidence these sponsors have expressed in the economic education movement. Special commendation should be given to S. Stowell Symmes, director of school services, who has coordinated the project for the Joint Council from its inception.

We are confident that *Strategies for Teaching Economics* will serve teachers well as practical guidelines for building economics lessons into existing curricula. Properly used, the *Master Curriculum Guide* can become a powerful device for accelerating economics instruction at all grade levels.

M. L. Frankel
*Former President*

Michael A. MacDowell
*President*

# Acknowledgments

Preparing *Strategies for Teaching Economics: Basic Business and Consumer Education* has been an especially arduous task partly because there are such varied professional opinions regarding the "proper" structure of consumer education and basic business courses.

Charles Boardman, Georgia State University; Clayton Millington, Oklahoma State University; Wanda Blockus, San Jose State University; Thomas Duff, University of Minnesota, Duluth; Curtis Hall, Virginia Commonwealth University; Eugene Wyllie, Indiana University; and Roman F. Warmke, Ohio University, were especially helpful to the Joint Council staff members who had to think through the problem of approaching consumer education and basic business courses within the Master Curriculum Guide format. As authors, we benefited indirectly from their advice and recommendations. We also benefited by examining early drafts of curriculum units prepared by George Petrello, Wagner College; Richard Brown, Northern Illinois University; and Dennis O'Toole, Virginia Commonwealth University. Among the teachers who critically reviewed the lessons published in this volume, special thanks are due Larry Derry and Gary Saunders of Macomb Senior High School and James Kunkel of DeKalb Senior High School for their valuable comments and suggestions for improvement. Many other individuals have helped to shape this undertaking. We trust that this edition, although not yet field tested, will allay their concerns and meet their approval.

The Joint Council's original plan was to prepare two separate strategy volumes, one for basic business and one for consumer education. Because we believe that basic business and consumer education courses have so much in common, we elected to fuse the two. The individuals mentioned above would not necessarily agree with this choice. Field testing by classroom teachers will ultimately confirm or deny the wisdom of our decision. We encourage users to send us their ideas and criticism for use in a subsequent edition.

James F. Niss
Judith Staley Brenneke
John E. Clow

# Overview and Rationale

The need for a much better understanding of economics by the American people is widely acknowledged. Many Americans including educators, labor leaders, business leaders, government officials, and consumer advocates have voiced agreement on the matter, and those voices have been increasing in number and grown louder in volume.

It is true that in the past a very productive economy was built in the United States by a people with little systematic knowledge of how that economy worked. But the example of the past may no longer be applicable. The U.S. economy has become progressively more complex, and as this is written, faces stubborn problems of inflation, unemployment, and a decline in the value of the dollar, as well as thorny questions about the proper limits of the role of government. Solutions to such matters require intelligent decisions and actions by individuals in their roles as voters, employers, employees, and consumers. The extent to which the economic understanding of individuals is improved may be an important determinant of how well the present difficulties of the American economy can be overcome.

Education that helps develop competence in economic decision making is desirable for young people not only in preparation for their future broad responsibilities but also for their present economic behavior. Whether the young earn income through part-time work or receive allowances from their parents, while still in secondary school they make relatively important buying decisions about clothing, entertainment, and means of transportation—cars, motorcycles, bicycles. They also begin to make decisions about how much to spend and how much to save. In spending, they need to know how to buy well and to apportion expenditures wisely; in saving, they need to know about the various forms of savings institutions and savings instruments available to them.

Many young people require other economic knowledge as well. Owners of cars or motorcycles should understand the principles of insurance. Those who work should understand how business firms operate. Those who earn enough to be liable for income taxes should understand how to file for taxes, why taxes exist, and how their tax payments relate to any benefits they receive. They should also understand the function of the Social Security taxes they pay. The topics we suggest for basic business and consumer courses—see Table 1—are largely dictated by the foregoing types of economic understanding that young people need.

An increase in economic literacy can be achieved without requiring every student to take a formal course in economics. Many teachers of courses in consumer economics or basic business are already explicitly or implicitly conveying some economic concepts. This volume of the *Master Curriculum Guide* is devoted to helping teachers of such courses in secondary schools—whatever the economic content of their present offerings—to bring key economic concepts to their students as effectively as possible. The basic business and consumer classrooms are ideal places to dispel economic illiteracy.

## The Role of Basic Business Education

Business educators have for decades offered courses designed to promote economic competence. General business, introduction to business, business law, business organization and management, basic business, and even consumer economics and consumer education are course titles commonly found under the heading of business education.[1] Courses in consumer economics or consumer education may be offered by departments other than the business department. We assume that the basic objectives of the consumer course are the same regardless of the department that offers the course.

The primary objectives of basic business courses have been well stated by a group of leading business educators. The basic business courses should aid students

1. to learn about career opportunities and the world of work;
2. to become competent in analyzing and evaluating the economic policies and activities of government agencies, business, industry, labor, and individuals;
3. to learn how to become intelligent consumers of goods and services;
4. to further refine communication, problem-solving, and decision-making skills;
5. to understand the importance of laws relating to the individual, to business, and to society; and
6. to refine personal traits necessary for success in occupational and community life.[2]

Achieving these objectives in the classroom requires learning activities that focus on basic economic princi-

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1. These courses primarily serve the curriculum in general education. The business education courses in the vocational curriculum primarily provide students with job skills with which to enter the working world.
2. "This We Believe About the Expanding Leadership and Planning Role of the Business Educator in General Education," *A Statement by the Policies Commission for Business and Economic Education*, National Business Education Association and Delta Pi Epsilon, 1970.

ples as well as on the rationale for markets and how the U.S. economy, in particular, works.

The objectives in the foregoing list are consistent with a similar statement that was developed by Anne Daughtrey a few years later.[3] A comparison of those two sets of objectives for the basic business courses with the objectives of the JCEE's *Master Curriculum Guide*[4] shows that the three have a great deal in common. All are concerned with imparting a knowledge of economic concepts and economic institutions as well as an understanding of the use of systematic economic reasoning. The JCEE publication, however, seeks to develop general literacy in economics from the standpoint of the economic decisions that society faces, whereas the basic business courses tend to place more emphasis on the sorts of economic decisions faced by individuals or by a particular business firm.

Basic business courses have played an integral role in the infusion of economic education into the curriculum, and they ought to continue to do so.[5] But economic education is not solely the responsibility of basic business education. The elementary school curriculum and subjects in the secondary curriculum such as home economics and social studies provide many opportunities for developing economic understanding.

## Consumer Education

The desire to provide American consumers with basic economic competence is demonstrated by the fact that over thirty states require the teaching of consumer concepts, and that in another six states the legislature or state educational authorities have made statements urging the teaching of consumer education.[6]

There seems to be no clear definition of the topics to be covered or the skills to be developed in courses on consumer education. In Illinois, consumer education is asked to make students "understand fully that the basic ingredient of economic competence is the wise use of resources (natural and human) as one chooses a job, earns, spends, saves, borrows, invests, and plans for the future."[7] Such instruction should foster individual development of "skills (and) concepts required for everyday living to achieve, within the framework of [the student's] values, maximum utilization of . . . [their] resources."[8] The Illinois program seeks to have a student:[9]

1. Become a better-informed consumer;
2. Understand the role of the consumer in our society;
3. Develop a sound decision-making process based on individual goals and values;
4. Utilize resources to facilitate greater satisfaction in making consumer decisions;
5. Understand the rights and responsibilities of the consumer in society.

A more elaborate attempt to define consumer education would lead us beyond the purpose of their guide. What the teacher should recognize is that the Illinois statements again emphasize that consumer economics, whether it is part of a basic business, social studies, or home economics curriculum, should enable students to use sound economic analysis in making decisions as consumers, producers, and citizens.

## Thrust of the Teaching and Learning Activities

The Joint Council on Economic Education's master curriculum project for economic education provides for a coordinated approach to economic education. The instructional activities we present in later pages exemplify ways in which the concepts highlighted by the Joint Council can be integrated into various units already included in many business and consumer courses. They are not meant to constitute a separate course; rather, they are designed to spark ideas for teachers or to be directly used as supplemental activities. We also suggest topics in basic business and consumer courses into which these activities could fit.

The activities are primarily geared to show students how economic concepts can be used in the decision-making processes of consumers and business managers, and how these decisions may in turn affect individuals as wage earners and citizens. It is also important for students to understand how economic decisions are interrelated. For example, an industry's decisions about what to produce may affect individuals differently in their roles as consumers than in their roles as wage earners or business managers.

The teacher should also demonstrate that the decision-making process for all parties involved in the economic system is similar. Business managers, government officials, and consumers use the same general systematic economic reasoning and confront the same economic concepts (e.g., scarcity, opportunity costs, supply and demand) when making economic decisions. The student should come away with a feeling that economic concepts are relevant to everyday life.

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3. Anne Scott Daughtrey, *Methods of Basic Business and Economic Education*, 2nd ed. (Cincinnati: South-Western Publishing Company, 1974).
4. See *Master Curriculum Guide for the Nation's Schools*, Part I, *A Framework for Teaching Economics: Basic Concepts* (1977), pp. 5, 8.
5. Gladys Bahr, "Two Decades of Partnership in Economic Education" (National Business Education Association, 1969), p. 3.
6. *Consumer Education Project: Final Report* (Denver, Colo.: Education Commission of the States, 1979).
7. *Guidelines for Consumer Education*, Office of the Superintendent of Public Instruction, State of Illinois (Springfield, Ill., 1972), p. 1.
8. Ibid., p. 2.
9. Ibid., p. 3.

## Some Additional Suggestions

Many teachers will find that they are already covering some of the subject matter of our instructional activities but that they do not use the same economic terms we do. There is an advantage to using the terms we employ, since many educators have found that using and understanding the language in which general economic principles and reasoning are commonly stated helps students to apply an economic approach to a wide range of problems or situations. One example is the use of the principle of opportunity cost. This principle can be easily and explicitly used in instructional units on money management. Weighing the benefits of using money for one thing rather than another has traditionally been covered in business and consumer courses without mention of the term "opportunity cost." If students thoroughly understand opportunity cost and are able to employ the principle correctly, they will come to see its wide-ranging applicability to matters so disparate as planning leisure time, evaluating legislation on an economic issue, or choosing a career.

Some teachers may find that a suggested activity emphasizes a line of thinking that is new to the courses they give. Such an activity, however, may introduce an analysis that can be built upon material that the teacher has already been presenting. For example, units on consumer protection usually do not stress factors "external" to the marketplace, such as uncontrolled air pollution from factories. After considering whether a market-related solution—e.g., taxing factories according to the amount of air pollution they cause—could deal with such an "externality," students should attempt to gauge whether protection of the environment is worth the additional or marginal cost in the price of those factories' products. If they think the market is unable to deal with the problem, the students ought to consider the merits compared to the demerits of using direct government regulation. In sum, the activities are designed to help students develop an increased awareness of the economics involved in the personal and social issues they are likely to be confronting, and an increased ability to deal with them. The activities not only provide the tools for decision-making, but also promote economic literacy, one of the fundamental goals of basic business and consumer education courses.

# A Note on the Selection of Basic Business and Consumer Education Topics and Economic Concepts

Knowing that basic business and consumer courses cover a wide range of subjects and offer many opportunities for developing economic understanding, we had to find a way to link the economic concepts of the *Master Curriculum Guide Framework* with topics found in consumer and basic business courses. The first step was to identify a set of topics that have a high probability of being included in these courses (see Table 1). These topics reflect the similarity of consumer and business decisions. Both sectors of the economy earn income, budget income, buy goods and services, use credit, decide between saving and investment, insure against risk, respond to government regulation, and pay taxes. The economic choices of consumers and of business managers are similar, although the perspective may be different.

Our next task was to select a few economic concepts from among those outlined in the *Framework*. Table 2 lists five clusters of economic ideas that we think best fit the consumer and basic business topics presented in Table 1. The following analysis demonstrates how each cluster can be linked to one or more of the topics. Cluster 1, *The Basic Economic Problem*, introduces the universal fact of economic life—that resources are scarce relative to the uses people have for them. Because of scarcity we are forced to make consumer and business choices. With unlimited abundance we would not have to make economic choices; without scarcity there would be no need to budget either time

**TABLE 1**
**Common or Related Topics in Consumer and Basic Business Courses**

| Consumer Education Topics | Basic Business Topics |
|---|---|
| 1. Budgeting | 1. Budgeting |
| 2. Credit | 2. Credit |
| 3. Buying<br>Consumer goods and services<br>Advertising | 3. Buying<br>Means and materials for production<br>Advertising |
| 4. Household income<br>Demand for labor | 4. Sales revenue<br>Demand for goods |
| 5. Saving/investment | 5. Investment |
| 6. Insurance<br>Risk spreading | 6. Insurance<br>Risk spreading |
| 7. Consumer protection<br>Truth in lending<br>Pure food and drug laws | 7. Government regulation<br>Environmental<br>Working conditions (OSHA) |
| 8. Taxes | 8. Taxes |

**TABLE 2**
**Key Economic Education Concepts Selected from Master Curriculum Guide**

| Concept Cluster |
|---|
| 1. *The Basic Economic Problem*<br>Wants<br>Productive resources/income/sales revenue<br>Scarcity and choice<br>Opportunity cost and trade-offs |
| 2. *The Market System*<br>Supply and demand; markets<br>Price mechanism; equilibrium<br>Competition and market structure<br>Price level changes/inflation<br>Saving/investment<br>Self-interest/profit motive |
| 3. *Household and Business Income*<br>Economic incentives (wages) (profits)<br>Markets, supply, and demand: equilibrium<br>Division of labor/interdependence/specialization<br>Transfer payments |
| 4. *Government Intervention*<br>Regulation<br>Taxation |
| 5. *Measurement Concepts*<br>Average<br>Rates vs. amounts |

or money and no need for credit. All goods and services would be free in unlimited amounts. Because economic scarcity is inescapable, goods and services are not free and they therefore bear a market price. Once individuals are forced to pay for things, they are also forced to choose among alternatives. At that point the principle of opportunity cost—what must be forgone in order to obtain something else—comes into play. In order to buy intelligently as well as to budget their limited income intelligently, consumers spending their wages and salaries, businesses allocating their sales revenues, and governments disbursing their taxes need to be aware of the things they must do without in order to obtain the things they decide to acquire.

Both producer and consumer choice-making are fundamental to the operation of *The Market System*, which we selected as Cluster 2. Individuals confront the economic concepts in this cluster daily when they earn, budget, buy, hire, save, and even when they scan advertisements or get other consumer information almost inadvertently while they relax with television, newspapers, or magazines.

We selected Cluster 3, *Household and Business Income*, because it links the wages and salaries earned by consumers to the costs of doing business. Similarly expenditures by consumers are linked to the sales revenue of business. Cluster 4, *Government Intervention*, places government regulations and taxes in perspective. Consumer educators and basic business educators cover many topics that can link the benefits of consumer protection legislation to the costs of operating a business enterprise. Not only can taxes be linked to the costs of consumer protection and government services, but they are directly related to the level of disposable consumer income and have an impact on the prices businesses charge for consumer goods and services.

Cluster 5, *Measurement Concepts*, was selected because statistical tools are crucial for explaining economic events and assessing economic performance. Profit rates are quite distinct from amounts of profit just as amounts of interest charged on a consumer loan must be distinguished from rates of interest. Failure to use measurement concepts properly can lead to faulty analysis and poor consumer and business decisions. For ready reference, a glossary of the MCG concepts detailed in Table 2 can be found near the end of this strategies volume.

The common topics and concepts of consumer and business decision-making in tables 1 and 2 have been converted into the classification scheme used in tables 3 and 4. Once teachers determine the topic to be studied, they can select lessons that emphasize appropriate concepts. Consider, for example, the topic of budgeting. An inspection of tables 3 and 4 indicates that lessons 1 and 16 relate to budgeting from the consumer's perspective, and since budgeting from the business perspective is related to inventory control, Lesson 6 would also be appropriate.

Some of the cells are empty. An empty cell indicates that this volume of strategies does not have lessons dealing with the concepts and topics cited. We hope that as teachers adapt these lessons to their classroom needs or develop new ones, they can begin to fill the empty cells. Should most of the cells become filled, teachers will have a sufficient variety of activities to reinforce the concepts students are expected to learn. Subsequent editions of this volume will include such strategies sent to us from the field.

## TABLE 3
### Matrix of Basic Business Topics and Key Economic Concepts
(numbers in boxes refer to lessons)

| Key Economic Concepts | Budgeting | Credit | Buying | Sales Revenue | Investment | Insurance | Government Regulation | Taxes |
|---|---|---|---|---|---|---|---|---|
| | **Basic Business Topics** | | | | | | | |
| *The Basic Economic Problem* | | | | | | | | |
| Wants | 6,16 | | | | | 17 | 14,15 | |
| Productive resources/income/sales revenue | 6,16 | 10 | | 7,8,9 | 6 9 | | 15 | |
| Scarcity and choice | 16 | 5 | | 7 | 6,18 | 17 | 15 | |
| Opportunity cost and trade-offs | 7,16 | | | 7 | 6,9,18 | 17 | 14,15 | 13 |
| *The Market System* | | | | | | | | |
| Supply and demand; markets | | | 12 | 2,7,8 | 10 | 17 | 14,15 | |
| Price mechanism; equilibrium | | | 7,12 | 2,7,8 | 18 | | 14,15 | |
| Competition and market structure | | | 7,12 | 7,8 | 6,8,11 18 | 17 | 14,15 | |
| Price level changes/inflation | | | 12 | | | | | 13 |
| Saving/investment | | | | | 6,7,9, 11,18 | 17 | 15 | |
| Self-interest/profit motive | 11 | | 12 | 8 | 6,8,9 11,18 | 17 | 14,15 | 13 |
| *Household and Business Income* | | | | | | | | |
| Economic incentives (wages) (profits) | | 5,10 | | 2,12 | 6,9,11 | 17 | 14,15 | 13 |
| Markets, supply, and demand, equilibrium | | 5,10 | 7 | 8,12 | | 17 | 14,15 | |
| Division of labor/interdependence/ specialization | | 10 | | 8,12 | 8 | | | |
| Transfer payments | 16 | | | | | 17 | | 13 |
| *Government Intervention* | | | | | | | | |
| Regulation | 16 | 5 | | | 18 | 17 | 5,14, 15 | 13 |
| Taxation | 16 | | | | 11 | | | 9,13 |
| *Measurement Concepts* | | | | | | | | |
| Average | 6 | 10 | 7,12 | 8,9,12 | 6,7,11 | | | 13 |
| Rates vs. amounts | 6 | 10 | 7,12 | 9,10,12 | 6,7,10 11,18 | 17 | | 9,13 |

**TABLE 4**

**Matrix of Consumer Education Topics and Key Economic Concepts**

(numbers in boxes refer to lessons)

| Key Economic Concepts | Consumer Education Topics: Budgeting | Credit | Buying | Household Income | Saving/Investment | Insurance | Consumer Protection | Taxes |
|---|---|---|---|---|---|---|---|---|
| *The Basic Economic Problem* | | | | | | | | |
| Wants | 1,5,16 | | 8 | 4 | | 17 | 14,15 | 3,13 |
| Productive resources/income/sales revenue | 5,16 | | 3 | 1 | 9,18 | | | 3,13 |
| Scarcity and choice | 1,16 | 5 | 2,3,5 | 4 | 18 | 17 | 15 | 3,13 |
| Opportunity cost and trade-offs | 1,16, 18 | 5 | 2,3,5 | | 9,18 | 17 | 14,15 | 13 |
| *The Market System* | | | | | | | | |
| Supply and demand; markets | | | 2,8,12 18 | | | 17 | 14,15 | |
| Price mechanism; equilibrium | | 5 | 2,12, 18 | | | | 14,15 | |
| Competition and market structure | | | 2,12 | | | 17 | 14,15 | |
| Price level changes/inflation | | | 5,12 | 4 | | | | 13 |
| Saving/investment | | | | | 9,18 | 17 | | |
| Self-interest/profit motive | 11 | | 3,12 | 11 | 11 | 17 | 14,15 | 13 |
| *Household and Business Income* | | | | | | | | |
| Economic incentives (wages) (profits) | 3 | | 2 | 9,11 | 9 | 17 | 14 | 3,13 |
| Markets; supply, and demand; equilibrium | | | | 3,4 | 18 | 17 | 14 | |
| Division of labor/interdependence/ specialization | | | | 3 | | | | |
| Transfer payments | 16 | | | 13 | | 17 | | |
| *Government Intervention* | | | | | | | | |
| Regulation | 16 | 5 | | | 18 | 17 | 14,15 | 13 |
| Taxation | 16 | | | | 18 | | 15 | 3,13 |
| *Measurement Concepts* | | | | | | | | |
| Average | | 5 | 12 | | | | | 13 |
| Rates vs. amounts | | 5 | 12 | 3 | 18 | 17 | | 3,13 |

# Evaluation of Learning Activities

Education is a continuous incremental process of refining one's knowledge, understanding, attitudes, and skills. Testing can play an important role in furthering the learning process itself. It is also a way to measure growth or change in student performance and thereby evaluate the efficiency of the teaching-learning procedure. Each lesson tries to meet these dual objectives by posing questions designed to guide and stimulate class discussion as well as for use in testing. Since each lesson is conducted over a relatively short period of time, we did not think it advisable to develop normed tests for each activity. We therefore recommend that to evaluate student learning over the full span of a basic business or consumer education course, teachers use the following test instruments. Each of them may be ordered from the Joint Council on Economic Education.

*Test of Understanding in Personal Economics*. An evaluative instrument of 50 multiple-choice questions normed in ninth- and twelfth-grade classes of social studies, business, and home economics students. An interpretative manual and discussion guide explain the importance of the questions, the concepts on which the questions focus, and the rationale for correct responses.

*Junior High School Test of Economics (Grades 7–9)*. An evaluative instrument of 40 questions classroom-tested with seventh, eighth, and ninth graders in twenty-two school districts. The manual includes a rationale for answers to each question, technical norming data, suggestions for use of the test, and an answer sheet and scoring key.

*Test of Economic Literacy*. The test comes in two equivalent forms (A and B) of 46 questions each at the high school level. The content categories are based on the *Master Curriculum Guide*, Part I. The test was nationally normed at the eleventh and twelfth grades in high schools. The test manual includes a discussion guide for each question, technical norming data, suggestions for use of the test, and model answer sheets and scoring keys.

The classroom teacher should appraise these nationally normed tests in terms of the extent to which they pertain to the ideas contained in the lessons the teacher has chosen to use.

## MASTER CURRICULUM GUIDE

### Instructional Activity Evaluation Form

Please complete an evaluation form for each activity used and return to: _____
(Name of Supervisor)

NAME: _____ SCHOOL ADDRESS: _____
(Person Completing Form)

DATE: _____ _____

_____

TITLE AND/OR LEVEL OF ACTIVITY PACKAGE: _____

NUMBER AND/OR TITLE OF ACTIVITY: _____

DESCRIPTION OF CLASS WITH WHICH ACTIVITY WAS USED:

Course Title: _____

Age Range or Grade Level: _____

Title of Textbook (if any): _____

Student Ability Level(s)—(Check one):

_____ Above Average

_____ Average

_____ Below Average

_____ Heterogeneous Group including All the Above

ACTIVITY EFFECTIVENESS (circle the number you think indicates the appropriate rating):

1. Are objectives clearly stated?

   Very Clear 5 4 3 2 1 Vague

2. Are objectives realistic in terms of student maturity at the specified age or grade level?

   Very Realistic 5 4 3 2 1 Unrealistic

3. Are teaching procedures stated in a manner so as to be easily understood?

   Easy to Understand 5 4 3 2 1 Very Difficult to Understand

4. Are teaching procedures appropriate for accomplishing objectives?

   Very Appropriate 5 4 3 2 1 Not Appropriate

5. Are teaching procedures appropriate for students of this age or grade level?

   Very Appropriate 5 4 3 2 1 Not Appropriate

6. Are recommended student materials appropriate for the age or grade level specified?

| Very Appropriate | 5 | 4 | 3 | 2 | 1 | Not Appropriate |
|---|---|---|---|---|---|---|

7. To what extent does this activity contribute to pupils' understanding of the particular economic concept it is designed to teach?

| Very Much | 5 | 4 | 3 | 2 | 1 | Not At All |
|---|---|---|---|---|---|---|

8. Did you use any of the items suggested for evaluation? _____
If yes, please provide the information requested below.

| *Number of Evaluation Item* | *Average Level of Class Performance (Circle one)* | | | |
|---|---|---|---|---|
| _____ | Excellent | Good | Acceptable | Poor |
| _____ | Excellent | Good | Acceptable | Poor |
| _____ | Excellent | Good | Acceptable | Poor |
| _____ | Excellent | Good | Acceptable | Poor |
| _____ | Excellent | Good | Acceptable | Poor |

9. What would be your overall rating of evaluation techniques suggested for this activity?

| Excellent | 5 | 4 | 3 | 2 | 1 | Poor |
|---|---|---|---|---|---|---|

10. What would be your overall rating of the activity in terms of its effectiveness for achieving stated objectives?

| Very Effective | 5 | 4 | 3 | 2 | 1 | Not At All Effective |
|---|---|---|---|---|---|---|

COMMENTS AND RECOMMENDATIONS: What changes and/or additions would you recommend for making this a more effective instructional activity? Please describe or, if available, include some samples of any additional teacher or student materials you used (for example: evaluation techniques). We welcome specific elaboration concerning any of the above questions.

(Attach extra sheets with comments and materials or use back of form)

Form prepared by June V. Gilliard,
*Director of Curriculum, JCEE*

## MASTER CURRICULUM GUIDE

**Instructional Activity Format for Basic Business and Consumer Education Strategies**

| | |
|---|---|
| TITLE: | Name of lesson. |
| TIME REQUIRED: | Time or number of class periods needed to complete the activity. |
| RECOMMENDED GRADE LEVEL: | Grade and/or ability level of students for whom the activity is intended. |
| MAJOR CONCEPTS: | Concepts around which the activity is mainly organized. |
| RELATED CONCEPTS: | Other economic concepts dealt with in the activity. |
| INSTRUCTIONAL OBJECTIVES: | For each objective we specify (1) the particular knowledge, skill, or attitude the student is expected to demonstrate; (2) the action the student will perform in demonstrating this knowledge, skill, or attitude (e.g., write, compare, state, list, etc.); (3) the conditions under which the action is to occur (e.g., given certain data or information, after viewing a particular film, participating in a particular field trip, etc.). |
| RATIONALE: | A brief statement explaining the significance of the activity. The statement may focus on what students should know, be aware of, or be able to do. Or, it may focus on the importance of the instructional approach being taken (e.g., use of gaming/simulation for motivational purposes or to have students apply certain skills, knowledge, etc.). |
| MATERIALS: | A list of all materials needed for the activity (e.g., books, games, films, etc.). |
| PROCEDURE: | A description of the teaching-learning process to be used for pupil attainment of objectives. Includes both teacher strategies and pupil activities. |
| EVALUATION: | A description of strategies, testing instruments, or other materials to be used for assessing student learning. |

# Lesson 1: Consumer Marketplace Decisions

TIME REQUIRED: 45–50 minutes

RECOMMENDED GRADE LEVEL: 9–12

MAJOR CONCEPTS: Scarcity and choice
Opportunity cost

RELATED CONCEPTS: Economic wants

**Instructional Objectives:** Students will

- Make better individual decisions through a conscious process;
- Evaluate the costs involved when they make a decision;
- Understand more fully the relationship between consumption and work.

**Rationale for the Activity:** Students are faced with an increasing number of products and services which they feel they need. One obvious way to obtain the money to buy these products and services is to earn money by working. However, students must realize the costs of choosing to work and of choosing other alternatives before making a decision.

**Materials:** A copy of Handout 1-1 for each student

**Procedure:**

1. Introduce the lesson with a series of warm-up questions for the students:
   a. How many of you work to earn money?
   b. What types of jobs do you have?
   c. How many hours per week do you work?
   d. Why do you work?
   e. Have you ever missed any school activities because of work?
2. Distribute the case study and have students read it.
3. Conduct class discussion using as a guide the set of questions at the end of the case study.
   NOTE: During the discussion reinforce the fact that time is a scarce resource and that there is an opportunity cost involved in allocating time. When discussing question 5 try to have each student state the criteria used to make the necessary decision.

**Evaluation:** Assess quality of student contribution to class discussion (use case study answer sheet as a guide).

**Teacher's Answer Sheet for Handout 1-1**

1. John has to decide how best to use his time (a scare resource). He must choose to own a car and spend time earning money to pay for it or choose to have time for basketball and the student council.
2. To continue as he is or to get a part-time job. Students may think of several other options that include looking for a job that does not conflict with basketball practice.
3. If he does not work, he cannot have his own car. If he does work he has far less free time and will have to cut down on his school activities.
4. The time for student activities and other spare time he must give up are opportunity costs. He may also damage his chances for a scholarship to junior college.
5. The answer will vary with the individual student. Ask each student to identify the opportunity costs associated with his/her answer.

# Handout 1-1

## CASE STUDY: TRANSPORTATION FOR JOHN

John is beginning his senior year of high school. He is actively involved in basketball and with the student council. He intends to start junior college after high school and believes that he will receive a scholarship because of his basketball ability and school leadership. Lately, John has been very unhappy because he must beg rides from his friends and must share the family car with his parents and older sister. What he wants is a car of his own. He has investigated the second-hand cars available and must decide how to pay the $500 for the car he has selected. He has been offered a job at a gas station where he could work weekday afternoons from 5 p.m. to 7 p.m. and four hours on Saturday. He could earn enough in three months to pay off a loan his dad is willing to give him.

*Should John take the part-time job at the gas station in order to purchase a car?*

Questions:

1. What is the dilemma encountered by John?

2. What options or alternatives does he have?

3. What are the costs associated with each alternative?

4. If he chooses to start working right away, what are his opportunity costs?

5. What option would you choose if you were John? Why? What would your opportunity cost be?

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary)*, 1979. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

# Lesson 2: Competing for the Consumer's Dollar

TIME REQUIRED: Two class periods (about one week apart)

RECOMMENDED GRADE LEVEL: 9–12

MAJOR CONCEPTS: Incentives
Competition and market structure

RELATED CONCEPTS: Scarcity and choice
Supply and demand
Price mechanism
Opportunity costs
Trade-offs

**Instructional Objectives:** Students will

- Identify incentives offered by cereal manufacturers to encourage the purchase of their product;
- Explain how and why retailers allocate space and choose display locations for the products they sell;
- List the steps to be taken to carry out comparison shopping.

**Rationale for the Activity:**

Practically every business wants to capture an ever-increasing share of the marketplace for its products. It does so by using a variety of competitive techniques including price changes, incentives other than price, and product differentiation. As students play the role of consumers, they will be making decisions in response to those business techniques.

**Materials:**

1. At least three copies of Handout 2-1 for each student; multiple copies of Handout 2-2.
2. Magazines, newspapers, access to a brokerage firm or to the business reference shelves of a local library, and other materials that can be provided by the teacher. For example, obtain annual reports in advance from all the major cereal producers and have them placed in your school library.

**Procedure:**

1. Discuss the number of manufacturers that are engaged in each one of several industries and how competition operates in a variety of ways besides meeting competitor's prices. Include a discussion of advertising, loss leaders, giveaways, discounts, premiums, and other retail practices (including space allotment and location of products in stores).
2. Divide students into teams. There should be one team for each grocery store assigned.
3. Distribute three copies of Handout 2-1, the Cereal Market Analysis Form, to each student. Give six copies if three copies are to be used as worksheets. Each team of students should be assigned one store, where they will complete a form for each of three different name-brand cereals.
4. Give students time to collect data and to perform their analysis outside of class. It may be appropriate to allow one week before analyzing the data.
5. Reproduce copies of each committee's report forms and distribute them to the class or have the reports made orally.
6. Have students analyze the results of their survey in at least two ways:
   a. Compare the information obtained within each store: How many manufacturers are represented? Which manufacturer was allocated the most shelf space? Is there any correlation between product promotions used and price? Let students probe the data on their own and try to explain why any differences exist.
   b. Compare the information obtained in different stores on the same name brand: Are there any differences in price, shelf location, and amount of shelf space allocated among the various stores? Why might these differences exist?
7. Ask class members to name factors which the companies think will influence consumer purchases of the cereals investigated. Note that many of the factors are examples of nonprice competition. Why do companies use these differing combinations of competitive practices?
8. Give students copies of Handout 2-2, and ask them to fill in the grid, using the data their group has collected. (Note that Step 1 has already been completed.) Have students list the three alternatives and state the criteria they think are important when choosing a dry cereal. Then ask students to select one of the three brands of cereals they studied as the best buy among the three alternatives and explain why the choice was made. (NOTE: Students may elect not to buy but they must explain why.)

**Evaluation:**

1. Review the quality of each group's Market Analysis Forms (Handout 2-1).
2. Assess quality of student contribution to class discussion and data analysis.
3. Review steps to be taken to carry out comparison shopping: *State* the problem (what brand to buy); collect information and *list* the alternatives (three or more brands); *state* criteria (price, size, taste, etc.); *evaluate* alternatives against criteria (is the box too big); and make a decision (*choose* brand X, or decided not to buy any brand).

# Teacher's Copy of Handout 2-2

## COMPARISON-SHOPPING PRODUCT EVALUATION FORM

Step 1. State the problem: **Choose which cereal is the best buy for me.**
Step 2. List the *alternatives* (use grid below)
Step 3. State the *criteria* (use grid below)

**DECISION-MAKING GRID**

| Alternatives | Criteria | | | | | |
|---|---|---|---|---|---|---|
| | Taste | Price | Unit Price | Box Size | Nutrition | Calories |
| Brand X | − | − | + | − | + | + |
| Brand Y | + | − | − | + | + | + |
| Brand Z | + | + | + | − | + | − |

Step 4. Evaluate the alternatives against criteria (use plus or minus signs in the appropriate box to indicate your assessment).

Step 5. Select the best choice Brand Y

Explain why this is the best choice for you. I live alone and prefer cereal packaged as single servings. I am also trying to lose weight. Brand Y, though more expensive, will stay fresh longer and will provide the same amount of nutrition as Brand Z with fewer calories.

# Handout 2-1

## CEREAL MARKET ANALYSIS FORM

Name(s) of person(s) completing this survey _____

Information obtained on dry cereals examined at _____ on _____
(store name) (date)

Please complete this form by means of retail market and library research. Choose approximately the same net weights per box for each brand of dry cereal. Complete one form for each brand selected.

BRAND NAME _____

A. Manufacturer _____

B. Is the company owned by another corporation? If yes, name of parent company

Yes ☐ No ☐ _____

C. Size and weight of package _____
Specify other sizes, weights, and prices for this same brand _____

D. Price per package _____

E. Unit price _____

F. Are promotions offered with this brand? Yes ☐ No ☐

If yes, how are they made known to the consumer?

1. Inside the package ☐
2. On the package itself ☐
3. In a special display ☐
4. By mail ☐
5. Through newspapers, magazines, circulars, or other types of advertising ☐

G. Location of cereal section in store _____

H. Location of this brand of cereal within the cereal section _____

I. Approximate percentage of cereal shelf space alloted to this brand _____

J. Number of other brands of cereal on the shelves _____

K. To whom does this company's advertising appeal: to children, teenagers, parents, the aged, adults in general?

_____

L. What does the advertising stress? _____

_____

M. Other observations or information on how this brand of cereal is marketed

_____

_____

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary)*, 1979. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

# Handout 2-2

## COMPARISON-SHOPPING PRODUCT EVALUATION FORM

Step 1. State the problem: **Choose which cereal is the best buy for me.**
Step 2. List the *alternatives* (use grid below)
Step 3. State the *criteria* (use grid below)

**DECISION-MAKING GRID**

| Alternatives | Criteria | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Step 4. Evaluate the alternatives against criteria (use plus or minus signs in the appropriate box to indicate your assessment).

Step 5. Select the best choice _____

Explain why this is the best choice for you. _____

_____

_____

_____

_____

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary)*, 1979. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

# Lesson 3: To Paint or Not to Paint

TIME REQUIRED: Two or three class periods plus time to collect price estimates.

RECOMMENDED GRADE LEVEL: 9–12

MAJOR CONCEPTS: Opportunity cost
Taxation
Gross income
Work-leisure trade-off

RELATED CONCEPTS: Productivity
Marginal tax rate

**Instructional Objectives:** Students will

- Choose intelligently between hiring someone to do a needed task and doing it themselves;
- Understand the impact of taxes when determining the gross income required to pay for an item;
- Justify their choices in terms of the benefits compared to the opportunity costs.

**Rationale for the Activity:** In the American economy the costs of services and of producing goods and services which require much individual labor have often increased sharply because the rate of productivity increase has been slower in labor-intensive industries than in capital-intensive industries. For example, even with better rollers and newly designed spraying equipment, it takes almost as many hours to paint a room today as it did twenty years ago. Though the work performed per hour (labor productivity) has remained about the same over the years, painters' wages have risen along with the general increase in wages. This phenomenon has resulted in many people's becoming do-it-yourselfers around the house.

Lesson 3 gives students an opportunity to think systematically about such consumer choices. Does it pay to do it yourself? That depends upon how people value their spare time and the amount of satisfaction they gain from personal accomplishment. It also depends on the income tax bracket of the individual. For example, as incomes increase, tax rates rise because of the progressive nature of the federal income tax. The activity shows how tax rates can influence a do-it-yourself spending decision.

**Materials:** One copy of Handout 3-1 for each student.

**Procedure:**

1. Give each student a copy of Handout 3-1.
2. Ask students to select a project that they could either do themselves or could hire someone else to do for them, for example, painting a room, changing an automobile muffler, cooking a meal, cleaning rugs and carpets, making clothes, baking a cake, fixing a faucet, or building book shelves. Have students fill in the appropriate blank on the worksheet. (NOTE: In selecting a project, students should assume that they can do about as good a job themselves as if they hired someone else.)
3. Have students make estimates of the outlays needed in each approach in order to complete the project. Give students time to collect cost estimates from stores, repair shops, etc., before completing Part I of the worksheet. This may require time outside of class unless you have an extensive collection of newspaper ads, catalogs, and other sources of information students can use in class.
4. Have each student complete Part II of the worksheet in class. This requires calculating the gross income required to pay for his/her project. Explain the formula to be used as follows: If the marginal tax rate (MTR)—the amount paid on the last dollar of income earned—is assumed to be 25 percent, then the family must earn $4 in order to have $3 left after taxes. If the family falls into the 50 percent tax bracket (MTR) then it would need $200 of income, at the margin, to pay out $100 for a room to be painted. Go over formula.

$$\frac{\text{Cost of services or materials}}{1 - \text{Marginal tax rate (MTR)}} = \text{Income required}$$

Example:

If the cost is $100 and the tax rate is 25 percent, the gross income required will be:

$$\frac{\$100}{1 - .25} = \frac{\$100}{.75} = \$133.33$$

If some students have great difficulty using the formula to make their own calculations, assign more capable students, perhaps equipped with a pocket calculator, to give assistance.

5. Have students complete Part III. Small groups (two or three students) can work out the answers together in class or the assignment may be given for homework. Discuss the answers. (NOTE: Make sure students understand why the answers to Part III should be in terms of *hourly earnings* before taxes, not total income before taxes.)
6. After all parts of the worksheet have been completed, conclude the lesson by asking students which of the alternatives they would choose and why.

**Evaluation:**

1. Review quality of student responses to the worksheet. Individual student responses will vary.
2. Assess quality of student class discussion associated with procedures 5 and 6.

# Handout 3-1

## SHOULD I DO IT MYSELF WORKSHEET

Name of student _____

Project selected _____

**Part I. Cost Estimates**

1. Estimated dollar cost to hire someone else to do the entire job _____

   Source of information _____

2. Estimated dollar cost to do the same job yourself (cost of materials) _____

   Estimated amount of time to do the project yourself _____

**Part II. Calculations**

1. How many dollars do you have to earn to pay the costs of this project if your tax bracket is 25%?

   Hiring someone _____ Doing it yourself _____

   Formula for calculation:

$$\frac{\text{Cost of services or materials}}{1 - \text{Marginal tax rate (MTR)}} = \text{Income required}$$

2. How many dollars do you have to earn to pay the costs of the project if your tax bracket is 50%?

   Hiring someone _____ Doing it yourself _____

   Formula for calculation:

$$\frac{\text{Cost of services or materials}}{1 - \text{Marginal tax rate (MTR)}} = \text{Income required}$$

**Part III. Questions**

1. If you do the job yourself, what do you estimate your hourly "rate of pay" is equivalent to? _____

   What is then the total cost? _____

2. If you hire someone else to do the job what will be the opportunity cost to you?

   _____

3. If you hire someone else to do the job what will be the benefits to you?

   _____

4. Would high-tax-bracket persons be more or less likely to do the job themselves?

   _____ Explain your answer _____

5. Why might persons with very high incomes nevertheless choose to do the job themselves?

   _____

*From Master Curriculum Guide for the Nation's Schools, Part II, Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary)*, 1979. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

# Lesson 4: What If Everyone Received $1,000,000

TIME REQUIRED: Three class periods

RECOMMENDED GRADE LEVEL: 9–12

MAJOR CONCEPTS: The price mechanism
Aggregate demand: inflation money

RELATED CONCEPTS: Economic wants
Scarcity and choice
Real income
Circular flow

**Instructional Objectives:** Students will

- Define inflation as an increase in the average price level of all goods and services in the economy, not just an increase in the price of a single commodity or service;
- Explain the relationship between the amount of money in circulation and price levels.

**Rationale for the Activity:** Many students have dreamed of receiving $1,000,000 from a generous benefactor. Some may believe that such a gift for everyone would be the answer to economic scarcity. They think that unlimited amounts of money will enable everyone to obtain all the goods and services he or she may want immediately and that no one would have to be concerned with budgets. However, more money by itself will not create real goods and services. This activity demonstrates that if everyone received $1,000,000 the effect would be to raise price levels dramatically (inflation) while the real income of consumers would remain basically unchanged. Through participation in a classroom token economy, students will take part in an auction with other students. This activity will help students understand the meaning of such concepts as consumer demand, price levels, and inflation.

**Materials:**

1. Chalkboard or overhead projector.
2. Token money (one or two pounds of macaroni shells work well).
3. Eight candy bars.
4. Multiple copies of Handout 4-1.
5. Materials for a regular basic business or consumer education lesson.

**Procedure:**

1. Review the attribute of money relevant to this activity, namely, money is anything that is generally acceptable as a medium of exchange. (NOTE: Make certain students understand how money is created in the United States. The New York and Minneapolis Federal Reserve banks have some excellent publications on this subject.)
2. Ask how many students would like to receive 1,000,000 U.S. dollars? (There should be a large show of hands.)
3. Ask the students to state what they would do with $1,000,000. (How much would they spend? How much would they save?)
4. Establish a "token pay economy"* in the following manner:
   a. Tell your students that for the next two days you will operate a special system in your classroom. You can call this system the token-pay-for-work system.
   b. Decide on four jobs for which students will receive some token (macaroni money) and decide how many tokens should be paid for each task. Some possible tasks are: coming to class, prompt completion of work, selected classroom clean-up jobs, asking questions, and so forth. Students may express puzzlement about the purpose of getting such "worthless tokens," but they will soon see that the macaroni has "value."
   c. Explain that at the end of the first day you will sell at auction four candy bars. Using the tokens, the four highest bidders will be able to "buy" a candy bar.
   d. Conduct any regular class lesson that gives students a chance to "earn" token money. Stop the class about 15–20 minutes before dismissal time. Have students turn in work record sheets to a student paymaster who will then pay each student accordingly. Bring out the first candy bar and hold the auction. Repeat the process with the second, third, and fourth bars. Record purchase prices on the chalkboard.
   e. Advise students who still have tokens to keep their money safe overnight. Tell students you will continue to pay for the same tasks on the following day, but do not explain further.
5. On the following day, give each student another work record sheet. Continue to conduct your class as usual and advise students to record the work they perform. Tell them that today you will triple the pay scales. Again, stop the class 15–20 minutes before dismissal time and have them turn in their

* This activity is adapted from "A Way of Amplifying the Concept of Inflation," *Master Curriculum Guide*, Part II, *Strategies for Teaching Economics: Intermediate Level* (New York: Joint Council on Economic Education, 1978), pp. 59–60.

worksheets to the paymaster. Conduct an auction of four more candy bars. Record the purchase prices on the chalkboard as illustrated, comparing day 1 with day 2. Day 2 prices should be higher.

**EXAMPLE**

| | Price | |
|---|---|---|
| | **Day 1** | **Day 2** |
| Bar 1 | 4 tokens | 18 tokens |
| Bar 2 | 6 tokens | 16 tokens |
| Bar 3 | 4 tokens | 20 tokens |
| Bar 4 | 7 tokens | 18 tokens |

NOTE: If some students have gone to the grocery store and purchased bags of macaroni shells you will find that the quantity of money circulating in your classroom has dramatically increased. Furthermore, if students pool their resources for the auction on the second day, prices will also be higher. This simulation can accommodate these occurrences, as will be shown in procedure 6.

6. On the third day discuss with students what has occurred on the previous two days. Did the tokens serve as money? Use the data generated from the auctions as you compare the prices of candy bars. How much "money" was in circulation on the first day? How much on the second day? Discuss the phenomenon of more money chasing the same amount of goods, i.e., only four candy bars on each day. What might have happened to prices if 400 candy bars had been auctioned off on the second day? What if wages were cut on the second day? Ask if anyone can think of comparable situations in the world outside the classroom. In what ways is the real world the same? In what ways is it different? Conclude the lesson by reinforcing the point that if the candy bars represented all the goods and services available and the token money represented the total money supply in the economy at any one time, then the classroom activity demonstrated inflation.
7. OPTIONAL: Announce that Senator Bucks is proposing that every person in the United States is to receive $1,000,000 in Federal Reserve notes. Ask students to write a short essay explaining: (a) what would be likely to happen to prices if everyone received this amount of money; (b) why prices would change; and (c) why the proposal would not be such a good idea to enact.

**Evaluation:**

1. Assess quality of student discussion generated during procedure 6.
2. Use procedure 7 as a written exam.

# Handout 4-1

## STUDENT WORK RECORD SHEET

Name of Student _____ Date _____

| **Tasks for Pay** (1) | **Rate of Pay** (2) | **Number of Times Task Is to Be Done** (3) | **Pay Due for Each Task** (col. 2 x col.3) (4) |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**Total Pay Due** (add figures in col. 4) _____

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary)*, 1979. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

# Lesson 5: Buying with Consumer Credit

TIME REQUIRED: Two class periods with time between for students to collect data

RECOMMENDED GRADE LEVEL: 9–12

MAJOR CONCEPTS: Scarcity and choice
Government regulation
Price of credit
Saving
Rates of interest

RELATED CONCEPTS: Opportunity costs and trade-offs
Freedom

**Instructional Objectives:** Students will

- List steps necessary to do effective comparison shopping;
- Know when comparison shopping should be done;
- Describe the information available to the consumer in a credit contract;
- Compare available sources of credit on the basis of information in the disclosure statement.

**Rationale for the Activity:** The use of consumer credit is increasing and there are a variety of government regulations that assist consumers. However, if the consumer does not know how to use these aids, they are largely ineffective.

**Materials:**

1. A copy of an ad for each student (to be supplied by teacher or to be clipped from magazines or newspaper by students).
2. A copy of handouts 5-1 and 5-2 for each student.

**Procedure:**

1. Distribute an ad for an expensive item that students would be interested in buying (e.g., a stereo set, a CB radio, ski equipment) or have students bring in an ad for an item they want but don't have the money for.
2. Ask students to assume that they are old enough to buy the item on credit and explain that they are going to "shop" for credit in order to buy the item.
3. Give students a copy of Handout 5-1. Discuss the information available on credit contracts, using the sample disclosure statement. Review the advantages to the consumer of having this information.
4. Distribute copies of Handout 5-2. The assignment is to obtain the information sought on the form through visits to three different types of credit suppliers: banks, credit companies, retail stores. Ask students to collect samples of written materials from each supplier of credit. These will be used for class discussion.
5. Once students have completed their interviews, conduct class or small group discussions using the following questions as a guide:
   a. Was the information obtained adequate to decide where to obtain credit?
   b. Is there any information that would be helpful but that the supplier of credit is not now required to give?
   c. Does it pay to shop for credit? Look at the costs in terms of required time for comparison shopping for credit against the benefits of lower interest charges for credit. Would the benefits outweigh the costs if the item to be bought could be financed at a low interest rate?
   d. How is freedom to choose made easier through the existing credit regulations?
   e. Do consumers really use the credit information to which they are entitled? Why or why not? Do they understand the information or does it merely become another form to sign?
   f. What are the opportunity costs of tying up future income in credit payments?
      (1) Future uses of the money if it were not used for repayments.
      (2) Interest that could be obtained from saving the future income.
   g. Why would someone buy on credit instead of saving for the item?
      (1) In order to have the immediate use of it.
      (2) If inflation continues, the loan would be repaid with cheaper money.
   h Why do suppliers of credit give out the credit information they do? What prompted the regulations that require retailers and others to disclose more about the cost and terms of the credit they supply to consumers? What do these regulations cost the consumer?
   i. What variations in the costs of credit did you find from your interviews? Why do these differences exist?
   j. Is there one "best" type of credit supplier for people who want to borrow for consumer purchases? How does a person determine the "best" source for credit?

**Evaluation:**

1. Assess the quality of data students collect for Handout 5-2.
2. Assess student responses to questions posed during class discussion.

# Handout 5-1

| ACCOUNT NUMBER | | | | |
|---|---|---|---|---|

## SEARS, ROEBUCK AND CO.

## DISCLOSURE STATEMENT

Sales Check No. _____ Date _____ 19____

☐ Easy Payment Plan

☐ Modernizing Credit Plan

| DESCRIPTION OF MERCHANDISE |
|---|
| |
| |
| |
| |
| |

| OFFICE USE ONLY (Code 4 Sales) | |
|---|---|
| No. of Months | Monthly Payment |
| | |

| | | | | |
|---|---|---|---|---|
| CASH PRICE | | | | |
| CASH DOWN PAYMENT | | | | |
| UNPAID BALANCE OF CASH PRICE - AMOUNT FINANCED | | | | |
| **FINANCE CHARGE** | | | | |
| DEFERRED PAYMENT PRICE | | | | |
| TOTAL OF PAYMENTS—THIS SALE | | | | |

**This purchase is payable in installments pursuant to my Sears Easy Payment Plan—Modernizing Credit Plan Retail Installment Contract and Security Agreement.**

**Beginning _____, I will pay $_____ per month for _____ months and a final monthly payment of $_____ until the amount financed and the FINANCE CHARGE for this purchase are fully paid.**

**If the FINANCE CHARGE exceeds $5.00, the ANNUAL PERCENTAGE RATE is ____ %**

**In accordance with my Sears Easy Payment Plan—Modernizing Credit Plan Retail Installment Contract and Security Agreement, a subsequent purchase may change the number and amount of my monthly payments, and / or the ANNUAL PERCENTAGE RATE of this purchase. Any such change will appear on my next monthly billing statement.**

**A copy of my sales check is attached hereto and incorporated by reference. Ownership of the merchandise described in such attached sales check remains in Sears until paid for in full.**

**If I pay in full in advance, any unearned FINANCE CHARGE will be rebated under the Rule of 78.**

11078-210 REV. 4-75

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# Handout 5-2

## SHOPPING FOR CREDIT EVALUATION FORM

Student _____ Date _____

Total loan requested _____ Item to be purchased _____

Estimated price _____

CREDIT SUPPLIER 1

Name _____

Address _____

Type of credit supplier (retailer, bank, credit company). Circle one.

Credit Information

Amount of payment _____

Number of payments _____

Duration of loan _____

Annual percentage rate _____

Special clauses _____

CREDIT SUPPLIER 2

Name _____

Address _____

Type of credit supplier (retailer, bank, credit company). Circle one.

Credit Information

Amount of payment _____

Number of payments _____

Duration of loan _____

Annual percentage rate _____

Special clauses _____

CREDIT SUPPLIER 3

Name _____

Address _____

Type of credit supplier (retailer, bank, credit company). Circle one.

Credit Information:

Amount of payment _____

Number of payments _____

Duration of loan _____

Annual percentage rate _____

Special clauses _____

Collect sample credit information brochures, contract forms, and disclosure statements from each credit supplier.

*From Master Curriculum Guide for the Nation's Schools, Part II, Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary)*, 1979. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

# Lesson 6: What Should I Stock?

TIME REQUIRED: 45–50 minutes

RECOMMENDED GRADE LEVEL: 9–12

MAJOR CONCEPTS: Maximization of profit
Business resources/ inventories
Profit rates
Investment

**Instructional Objectives:** Students will

- State the goal of the firm: profit maximization;
- Know that choices are required when budgets are limited;
- Explain the difference between profit rates and total profit per time period—in this case, one year.

**Rationale for the Activity:** Almost all families have insufficient income to buy everything the family desires. However, students may not realize that businesses and governments are faced with similar constraints and, therefore, must also make choices and allocate resources. Business firms desire to maximize profit. They do so by choosing the best alternatives for the use of scarce productive resources. The resource in this lesson is the composition of business inventories.

**Materials:** Copies of handouts 6-1 and 6-2 for each student or group of students.

**Procedure:**

1. Discuss briefly the goal of private business.
2. Then provide Handout 6-1 and have students read the "case" to determine the choice of business inventory that appears to give the Sandrys maximum profits.
3. Without much additional discussion, distribute Handout 6-2 and ask students to fill in the blank spaces.
4. Then with the new information ask the students to make a decision about which goods to stock.
5. It is recommended that you then write out Table 2 on the board for discussion. This table will help the students analyze the concepts of profit per dollar of sales as well as return on investment.

**Evaluation:**

1. Assess quality of class discussion related to Handout 6-1.
2. Collect student responses to Handout 6-2 and assess quality of responses. Problem B can be used as a written exercise. Use teacher answer sheet as a guide.

**Teacher Answer Sheet for Lesson 6,**
**What Should I Stock?**

**HANDOUT 6-1:**
Given only the information on Handout 6-1, students will tend to select home entertainment centers as the product line that would return the most profit per dollar of sales.

**HANDOUT 6-2:**
*Problem A:* Color TV sets will return the most profits to the Sandrys' investment in inventories. The students should be able to calculate this from the information in Table 1 and the selected information from Table 2 that you give them. Similar calculations show that going into home entertainment centers would be only half as profitable as color TV's, while refrigerators would also be considerably less profitable. The reason color TV is the best investment is that an investment in TV inventories would be used more efficiently—i.e., "turned over" faster—than investment in the other appliances. When the Sandrys purchase color TV's, they are able to use their $10,000 investment in inventory twice in a single year. They thus double the annual amount they earn on their $10,000.

You can generalize this point for your students. The percent of profit earned on investment in inventories is, in part, a function of the number of units sold over a given period of time—the "turnover rate" of the inventory. Even if the profit on each unit sold remains the same, higher turnover rates result in higher total profits in dollars and in higher profits on the dollars invested in inventory.

*Problem B:* They might very well be different. A large store in a better location and with more customers might be able to invest in all three products—though perhaps still devoting *more* to color TV's—in case the estimates about how much of each product customers will buy turn out to be somewhat inaccurate. (This is called diversification, because the store buys a variety of products in order to distribute—diversify—its risks.)

There are other reasons why a large store might not make precisely the same decisions. The large store may well be able to influence consumer choice by running special sales days for one product or another. It can also influence the consumer by advertising one product more than another. It is better able to borrow from banks in order to invest additional amounts to diversify inventories. It may be able to buy the appliance "packages" at a somewhat reduced price, because it buys in great quantity.

## TABLE 2 (Teacher's Copy)
## Analysis of Estimated Profitability for One Year of Sales

| | Home Entertainment Center | Color TV | Refrigerator |
|---|---|---|---|
| Number of units sold | 10 | 66[a] | 20 |
| Value of total sales | $ 8,000 | $29,700 | $12,400 |
| Profits per unit | 100 | 30 | 60 |
| Total profit | 1,000 | 1,980 | 1,200 |
| Percent of profit on total sales | 12.5% | 6.7% | 9.7% |
| Total inventory investment | $10,000 | $10,000[a] | $10,000 |
| Percent of profit on inventory investment | 10.0% | 19.8% | 12.0% |

[a] This assumes that as the "package" of 33 units originally bought begins to run out, the Sandrys take the proceeds plus money earned from sales of other appliances to buy another "package" of 33 units.

# Handout 6-1

## WHAT SHOULD I STOCK?

Mary and Adolph Sandry need to choose what to stock (i.e., the composition of the inventory) in their small appliance store. The Sandrys' business has done well in the past year. As a result, they have accumulated $10,000 that they can use to increase the store's inventory. They want to add a new line of products. Naturally, they want to choose the line that will earn the maximum profit on the $10,000 available for their investment in more inventory.

The Sandrys are visited by a number of sales people representing manufacturers. After evaluating various proposals, three different lines of products seem to fit the store's location and market: home entertainment centers, color TV sets, and refrigerators.

Each manufacturer has a "package deal" for the Sandrys to consider. For $10,000 the Sandrys can purchase 20 home entertainment centers, 33 color TV sets, or 25 refrigerators. On the basis of this information and the data in Table 1, which line appears to provide the highest profit potential?

**TABLE 1**
**Expected Costs, Selling Prices, and Profit Estimates per Unit for Three Product Lines**

| | Home Entertainment Center | | Color TV | | Refrigerator | |
|---|---|---|---|---|---|---|
| Unit cost from manufacturers | $500 | | $300 | | $400 | |
| Sales expenses per unit | 200 | | 120 | | 160 | |
| Total costs per unit | | $700 | | $420 | | $560 |
| Expected selling price (total revenue per unit) | | $800 | | $450 | | $620 |
| Profit per unit (total revenue minus total costs) | | 100 | | 100 | | 60 |
| Percent of profit on sales per unit | | 12.5% | | 6.7% | | 9.7% |

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary)*, 1979. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

# Handout 6-2

## WHAT SHOULD I STOCK?

After thinking about the three proposals overnight, the Sandrys conclude that it is important for them to consider *how many* units can be sold as well as the percent of profit on sales per unit.

The Sandrys estimate that during the next year they can sell 10 home entertainment centers, 66 color TV sets, and 20 refrigerators.

**Problem A:**
Given this additional information and the data in Table 1, calculate the missing information in Table 2. Now which line appears to offer the most profit per year if the Sandrys invest $10,000 in inventory? Be prepared to explain your answer to the class.

**Problem B:**
Assume that the Sandrys are owners of a large appliance store with several retail outlets. In that case, are there any reasons why their inventory decisions would be different?

**TABLE 2**
**Analysis of Estimated Profitability for One Year of Sales**

| | Home Entertainment Center | Color TV | Refrigerator |
|---|---|---|---|
| Number of units sold | 10 | 66[a] | 20 |
| Value of total sales | $ | $ | $ |
| Profits per unit | $ 100 | $ 30 | $ 60 |
| Total profit | $ | $ | $ |
| Percent of profit on total sales | % | % | % |
| Total inventory investment | $10,000 | $10,000[a] | $10,000 |
| Percent of profit on inventory investment | % | % | % |

[a] This assumes that as the "package" of 33 units originally bought begins to run out, the Sandrys take the proceeds plus money earned from sales of other appliances to buy another "package" of 33 units.

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# Lesson 7: Producer's Choice—Where to Produce

TIME REQUIRED: 45–50 minutes. Some classes may require more time to complete all three problems.

RECOMMENDED GRADE LEVEL: 9–12

MAJOR CONCEPTS: Least cost of production
Production cost

RELATED CONCEPTS: Profits

**Instructional Objectives:** Students will
- List the factors of production—land, labor (including entrepreneurship), and capital;
- Select the least-cost producing unit;

**Rationale for the Activity:** Business firms must search for the lowest prices for the land, labor, and capital they need. Since their goal is maximum profits, products must be produced as cheaply as possible. Production cost is least only when the lowest-priced combination of inputs to provide a given good or service is used. Students should understand this basic principle of conducting business because it helps explain business decisions that affect employment of resources.

**Materials:**
1. Chalkboard.
2. One copy of Handout 7-1 for each student.

**Procedure:**
1. Give each student a copy of Handout 7-1. Tell the students they are managers of a firm with two plants, one in Chicago and one in Memphis. Both plants produce the same product—metal boxes. Have them review the cost data before solving the problems.
2. Assign individual students or small groups to work on problem A. Using the information provided they are to choose the plant that can produce and sell the product so as to minimize cost and maximize profit, given a market price of $10.00. Assume that the manufacturer will pay for the transportation of the boxes to the buyers. Ask the students to choose which production location should be assigned to supply Milwaukee. Discuss the answers.
3. Assign individual students or small groups to work on problem B. Discuss the answers.
4. Assign individual students or small groups to work on problem C. Discuss the answers.

**Evaluation:**
1. Assess responses to problem worksheets and/or class discussion.
2. Problems B and C can be used as home assignments or an in-class test if Handout 7-1 is modified to include only Problem A.

**Teacher Answer Sheet to Case Study**

**PROBLEM A:**
- The Chicago plant is the least-cost plant when transportation to Milwaukee is included, given the uniform selling price of $10 per metal box. If the product were shipped from Memphis, the profit would be only 45 cents per box, while shipment from Chicago yields a profit of 71 cents per box.
  Chicago: $9.10 + $0.19 ($0.10 + $0.09) = $9.29
  Memphis: $8.90 + $0.65 ($0.10 + $0.55) = $9.55
- The Chicago plant has a 71-cent profit. Therefore, Memphis, the plant with the lowest cost of production, does not supply Milwaukee.

**PROBLEM B:**
- With added capacity in the Memphis plant, average cost per box made in Memphis fell to $7.20. The Chicago plant will therefore close since it is cheaper to produce and ship to Milwaukee from Memphis ($7.20 + $0.65 = $7.85) than to produce in Chicago.
- If the Chicago plant were used, the manufacturer would not make the maximum possible profit. Worse yet, the idleness at Memphis would be more of a loss because it now has more unused capacity.
- The increase in firm profits may prompt an attempt by labor to obtain higher wages, since part of the profit increase came from greater labor productivity: labor costs per box fell from $2.80 to $2.00. (Note that the $2.00 unit labor cost is a production cost for the manufacturer, not the actual hourly pay of workers. Hourly pay rates are not given in this exercise.)

**PROBLEM C:**
Computation will show that the Chicago plant can produce and deliver to the Des Moines market at a cost of $9.50 per box. Therefore, at a price of $11 per box, a net profit of $1.50 per box can be earned. Under these conditions the Chicago plant will be reopened.

If the firm's managers wanted to supply the Des Moines market without reopening the Chicago plant, they would have to expand production capacity at Memphis or they could give up the Milwaukee business. The determining factors would be how much the new plant expansion would cost per unit of output and the relative transportation costs between Memphis and Des Moines as compared to costs between Memphis and Milwaukee.

# Handout 7-1

## SALES INFORMATION AND UNIT COSTS OF PRODUCING METAL BOXES

| | *Chicago Plant* | *Memphis Plant* |
|---|---|---|
| Labor | $3.00 | $2.80 |
| Capital | 1.00 | 1.05 |
| Land cost (rent) | 0.10 | 0.05 |
| Raw material inputs | 5.00 | 5.00 |
| Total costs per box | $9.10 | $8.90 |

Both plants have a production capacity of 1,000 boxes per day.

**Sales**

Chicago plant sells 1,000 boxes per day in Milwaukee for $10 a box.
Memphis plant sells 1,000 boxes per day in Memphis area for $10 a box.

**Distance:**

Chicago to Milwaukee 90 miles
Memphis to Milwaukee 550 miles

**Transportation cost:** 10 cents per box plus 10 cents per hundred miles.

**Problem A:** Given the information on costs of producing metal boxes and the sales information reproduced on Handout No. 7-1, answer the following questions:

- Which plant should be used by the metal box firm to supply the Milwaukee market?
- What is the profit per box that your firm will earn?
- Why did you find that the plant with the highest production cost per box will be used to supply the Milwaukee market?

**Problem B:** Upon evaluation of the costs of production, it is discovered that adding plant capacity of 1,000 boxes per day at the better equipped Memphis plant would increase the efficiency of labor and reduce the cost of raw materials per box. The new building will increase the cost of capital goods per unit. These adjustments will mean a new production cost schedule as follows:

Unit costs of producing metal boxes at Memphis after doubling the production capacity of the Memphis plant

| | |
|---|---|
| Labor | $2.00 |
| Capital | 1.15 |
| Land | 0.05 |
| Raw materials | 4.00 |
| Total cost | $7.20 |

- Given these new lower costs, what would you do with regard to production for the Milwaukee market and the use of the Chicago plant?
- What would happen to firm profits if the Chicago plant were used after the capacity was added to the Memphis plant?
- If the Chicago plant is closed and profits at the Memphis plant rise, why do you think Memphis workers could ask for wage increases?

**Problem C:** Assume that the firm has closed its Chicago plant and is producing boxes for the Milwaukee market at its Memphis plant and that the Memphis plant is selling all the boxes it can produce. Then as a result of good word-of-mouth advertising by a group of Milwaukee buyers who have moved to Des Moines, Iowa, your firm finds that it can sell 1,000 boxes per day in Des Moines at a price of $11 per box. Des Moines is 300 miles from Chicago. You must now respond to the following questions:

- If your firm could reopen its Chicago plant at little or no extra cost, would you recommend reopening the plant?
- Will the unit price exceed the unit costs of production plus transportation from Chicago? HINT: How much profit per unit will there be?
- In what other ways might the firm supply the boxes demanded if the Chicago plant could not be reopened?

*From Master Curriculum Guide for the Nation's Schools, Part II, Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary)*, 1979. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

# Lesson 8: Mass Markets, Advertising, and the Product Cycle

TIME REQUIRED: 45–50 minutes

RECOMMENDED GRADE LEVEL: 9–12

MAJOR CONCEPTS: Specialization
Division of labor
Price
Cost of production
Product demand

**Instructional Objectives:** Students will
- Define division of labor and cost of production;
- Show how advertising can stimulate demand for a new product;
- Explain the effect that advertising can have on the cost of a product at different stages of its history.

**Rationale for the Activity:** Many products tend to follow a typical market pattern that students—as consumers—ought to know about. When first introduced, demand for a new product is usually limited and the cost of production is relatively high. As a product's market matures, demand increases and production costs per unit tend to fall. Profits per unit and total profits therefore climb. Eventually the growth of demand slows, production costs per unit stop falling, and profits per unit tend to decline. Automobiles, television sets, and personal calculators are products that have followed a typical "life-cycle" pattern. Lesson 8 shows the interrelation of demand, costs, and price during these various stages of production.

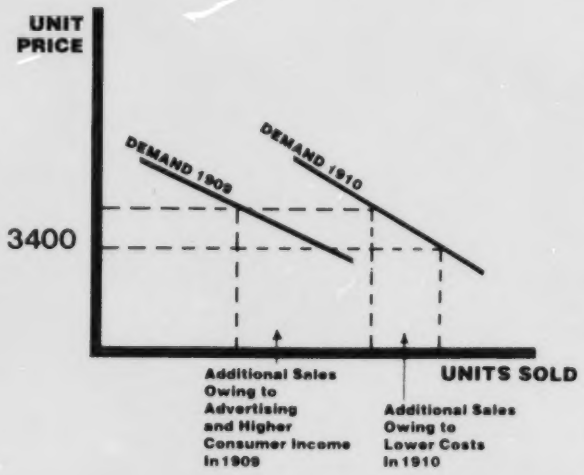
**Materials:** Multiple copies of handouts 8-1, 8-2, and 8-3.

**Procedure:**
1. Provide each student (or group of students) with a copy of Handout 8-1 and ask them to read it.
2. Provide each student with a copy of Handout 8-2. Be sure students understand what the chart depicts. Make certain that the students understand the concept of expressing prices in constant dollars (i.e., prices as of a given year) before they start answering the questions. Provide each student with a copy of Handout 8-3 and have them work on the answers.
3. Allow the group or the class as a whole to react to the questions and then concentrate on discussing answers to the questions. Demand curves may be used to illustrate student responses if students have been introduced to them previously.
4. Discuss questions 3–6 using TV sales in the 1950s (black and white sets) and the 1970s (color sets) as the product. The analysis will parallel the Ford case study.

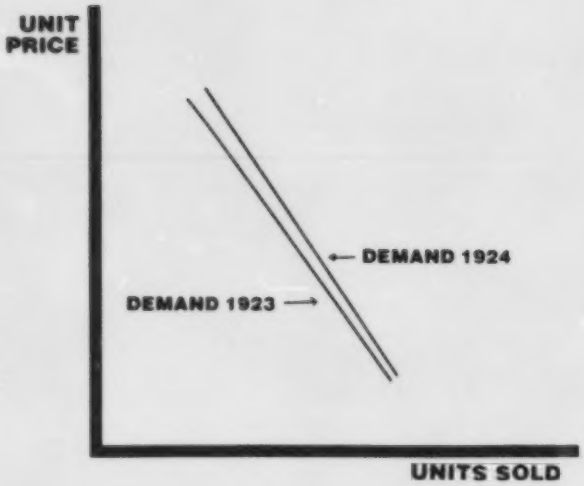
**Evaluation:**
1. Assess quality of student contribution to class discussion.
2. Assess quality of student responses to questions in Handout 8-3. Use the answer sheet below as a guide.

**Teacher Answer Sheet to Handout 8-3, Questions on the Case Study: The Ford Experience**

1a. About 18,000 cars.
b. $3,400.
2a. Approximately 8 million cars.
b. $950.
3. Ford developed the assembly line and other mass-production techniques. This raised output per man-hour because of specialization, and thus lowered costs. These same techniques substituted capital for labor, and the saving on labor also reduced cost. Ford also secured savings by producing many of the raw materials and parts in his own company—an organizational technique we now call vertical integration.
4. It should have shifted demand, increased sales, and prompted even greater use of mass production methods. Ford also wanted to lower prices to attract more customers. If advertising could have increased the market, it probably would have helped lower production costs even faster, thus also making it possible for more customers to buy the car. Since the incomes of Americans were rising, heavy advertising might have led to more car sales even if the price had not been lowered.


UNIT PRICE
DEMAND 1909
DEMAND 1910
3400
UNITS SOLD
Additional Sales Owing to Advertising and Higher Consumer Income in 1909
Additional Sales Owing to Lower Costs in 1910

5. By 1923 the desire of the public to purchase a car designed in 1909 had declined. It looked obsolete even when new. As a result, an increase in advertising would have attracted few additional buyers. (Note that under the market conditions depicted in the chart below, demand in 1923 and 1924 is for all practical purposes the same.)




However, the cost of additional advertising would have added to the total cost of producing and marketing the car. This would have required some increase in the sales price and such an increase might well have reduced the number of cars sold.

6. If a good has not yet been mass produced and the economies of mass production therefore not yet achieved, then advertising, by causing people to become aware of the product, can increase sales and lower costs, which can lead to a reduction in price. The reduction in prices may then lead to still greater sales and more advertising, thus lowering costs and prices further, and so on. But if a good is already being mass produced and costs are already low, or if advertising does not increase sales, the producer's costs and thus the price to the consumer may both increase.

# Handout 8-1

## CASE STUDY: THE FORD EXPERIENCE

In 1909 Henry Ford introduced the Model T. The car had large wheels, a strong steel frame, and was exceedingly simple to repair and maintain. Your grandfather and great-grandfather may well have learned to drive, travel about the country, and repair automobiles on the Model T.

Henry Ford's idea was to expand production in order to lower costs and increase sales. To meet these objectives, Ford spent many of the years between 1909 and 1927 in developing the assembly line and other mass production techniques to reduce the Model T's costs. The effort included the use of subassembly lines for some components such as motors.

The Ford company also built plants to produce steel, glass, and many other basic items required to produce a car. In fifteen years, nearly 8 million Model T's were turned out. In almost every year, as more cars were produced, costs were reduced and Ford could lower the selling price. (Of course, many improvements were made on the original Model T as time went on.)

Ford was so sure that the lower costs achieved by standardizing the product would attract buyers that he went so far as to say, "You can have any color you want so long as it's black." But he turned out to be wrong. By 1923, others in the industry had developed a new concept for selling cars. Chevrolet began to offer a new model in a variety of colors every year. These style changes made the Model T look obsolete and old by comparison. As a result, Ford's sales fell. In 1927, Henry Ford finally saw that it was necessary to change car styles. He closed his assembly lines for several months to retool and rebuild. The result was a new and restyled car. The Model A was introduced in 1927.

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary)*, 1979. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

REVISED

# Handout 8-2

Price of Model T, 1909-1923 (Average list price in 1958 dollars)

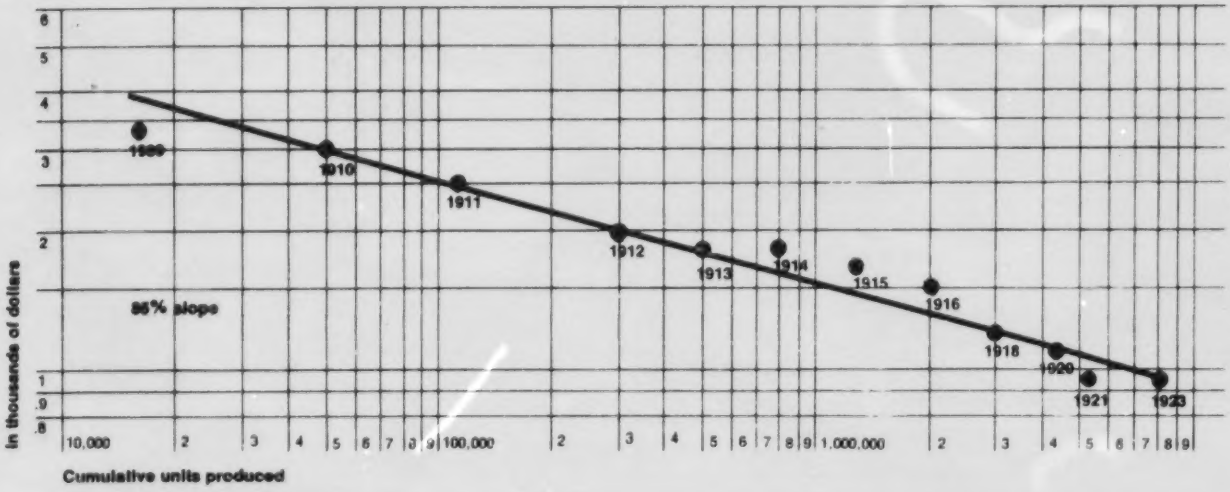



Chart reprinted from William J. Abernathy and Kenneth Wayne, "Limits of the Learning Curve," *Harvard Business Review*, September-October 1974. Copyright © by the President and Fellows of Harvard College, all rights reserved.

# Handout 8-3

## QUESTIONS TO ACCOMPANY CASE STUDY: THE FORD EXPERIENCE

(Use space provided for your answers)

1a. How many Model T's were produced in 1909? _____

b. What was the price per unit in 1909? _____

2a. What was the total number of cars produced from 1909 through 1923? _____

b. What was the price per car in 1923? _____

3. What could have been some reasons for the decrease in the sales price from 1909 to 1923?

_____

_____

_____

_____

4. If Ford had spent money on advertising to make people more aware of his product in 1909, what might have happened?

_____

_____

_____

_____

5. Ford closed for several months in 1926 to retool his factory for a new line of cars. What might have happened to sales and costs in 1926 if the money had been spent on advertising the old model instead of on retooling?

_____

_____

_____

_____

6. What is a conclusion that can be drawn from the Ford situation about the effect of advertising on the price of a good?

_____

_____

_____

_____

_____

NAME _____ DATE _____

*From Master Curriculum Guide for the Nation's Schools, Part II, Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary),* 1975. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

# Lesson 9: What Is an Adequate Profit?

TIME REQUIRED: 45–50 minutes

RECOMMENDED GRADE LEVEL: 9–12

MAJOR CONCEPTS: Opportunity cost
Factors of production
Profit

RELATED CONCEPTS: Investment
Risk
Taxation
Rate of return

**Instructional Objectives:** Students will

- Identify the costs of various factors of production;
- Explain why investment in an enterprise depends on the prospect that the enterprise will make a profit;
- Compute the return on investment;
- Use the principle of opportunity cost to make investment decisions;
- List various factors that should be considered when determining whether a profit or rate of return is adequate or not.

**Rationale for the Activity:** People have many misconceptions about the nature and amount of profits earned by owners of businesses. This activity will help students identify the components of profits in a small business and evaluate the rates of return on investment.

**Materials:** One copy of handouts 9-1 and 9-2 for each student.

**Procedure:**

1. To get the students started on the problem ask them to answer the following questions:
   a. What is profit?
   b. How do you feel about profits?
   c. How does one determine whether a particular profit is adequate or not?

NOTE: Students will probably give varying responses to these questions. Make the point that the variations in responses show that students have some rather indefinite ideas about profits. Indicate that the lesson will focus on some definite guidelines for the students to use in answering the questions they have just been asked.

2. Distribute copies of Handout 9-1 and have students read the case study. You may want to give a short review on the factors of production and on the ways to figure net profit and return on investment before students are given the analytic questions.
3. Once all students understand the meaning of the terms in the case study, distribute Handout 9-2. Students can work out answers to the problems individually, in small groups, or you may want to work through the problems with the class, explaining the concepts as you go.
4. Conduct class discussion on the answers to the analytic questions. Close the activity by pointing out that each situation must be studied very carefully before determining whether a profit or rate of return is adequate or not. Among the factors to be considered are: variation in profit from one year to the next, whether profit includes payment for the owner's services, and how the profit compares to other investments carrying various types of risks.

**Evaluation:**

1. Assess quality of student response to questions on Handout 9-2.
2. Use question 13 as an "open book" essay test and assess quality of the responses.

**Teacher Answer Sheet for Handout 9-2**

1a. $80,000.

b. Gross sales are not the same as profit since part of sales receipts must be used to pay for production costs.

2.

| | | |
|---|---|---|
| Human resources | $44,000 | |
| Natural resources | 10,000 | (utilities plus raw materials) |
| Capital goods | 13,000 | (rental of building plus depreciation of equipment) |

NOTE: In the strict economic sense, inventories of raw materials such as nails are considered to be capital goods. If students choose to classify the raw materials this way, the total expenditures will not change even though the amounts per category will be different.

3a. $67,000.

b. $3.35 ($67,000 ÷ 20,000 pairs = $3.35 a pair).

4a. $4.00 − $3.35 = 65¢ profit per pair.

b. $80,000 − $67,000 = $13,000 gross profit.

5. $10,000.

NOTE: An income tax of $3,000 is an arbitrary but realistic figure. In 1978 a business with a gross profit of $13,000 would have paid $2,600 in federal tax if organized as a regular corporation. If it had been organized as a small business

corporation the owner(s) would pay about $1,000 in federal tax. State and/or local business income taxes vary widely but $900 would be a good average estimate.

6. For example, Susie may have wanted job independence, so she became boss of her own firm; or she thought she could make an adequate profit or rate of return on her investment, or she thought she could earn more income than if she worked for someone else and put her investment funds in the bank.

7a. Yes.

b. Susie assumed risks when investing her money in the firm. She could have lost much of her money if not enough of her shoes were purchased or if her estimates of costs and prices turned out to be inaccurate.

8. $10,000 ÷ $35,000 = 28.6 percent.

9. 8 percent.

10a. Yes.

b. She is entitled to a greater return because she assumed more risk. Savings accounts generally carry a low risk, meaning there is little chance of losing one's money. Some students may balk at the high rate received on her investment in the firm. They should be reminded that there is no promise or certainty that she will do as well next year, and beyond. Furthermore in this example Susie had a net profit of $10,000. If she had earned $11,000 by working for someone else (the same as her employees earn) and also had $2,800 in savings bank interest, she could have earned $13,800 with far less risk.

11. It is the amount she could have earned in her next best investment outlet.

12. No. If the position held by Tom is quite comparable to that assumed by Susie, the $10,000 "profit" could be considered as payment for Susie's labor, leaving nothing to represent a return on her investment of $35,000.

13. Many factors must be considered in evaluating whether a profit or return on investment is adequate or not. Some of the considerations are: Is the return for investment or for investment plus labor? Is the return comparable to other investments of like risk? Is the return likely to be steady or will it fluctuate widely from year to year?

# Handout 9-1

## CASE STUDY: SUSIE COMFY SHOES

Susie Comfy has a small shoe firm that makes only one type of shoe called the "bare sandal." She supervises the factory, which employs four employees other than herself. They produce the sandals only after receiving orders from retail establishments throughout the nation.

The first year of operation of the firm has just ended. Susie invested $35,000, mostly for equipment necessary to make the sandals. She is the sole owner. She does not draw a salary from the business—her only compensation is "accounting" profit.*

During the year, the firm produced and sold 20,000 pairs of shoes at an average price of $4 per pair.

* "Accounting" profit is larger than "economic" profit in this instance. Even though Susie did not pay herself wages, part of the accounting profit must be considered as a payment for her own labor.

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary)*, 1979. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

# Handout 9-2

## ANALYTIC QUESTIONS TO ACCOMPANY CASE STUDY: SUSIE COMFY SHOES

1a. What would be the gross sales for the firm?

b. Are the gross sales the same as the amount of profit?

2. If the actual production costs for the shoes were:

| | |
|---|---|
| Salaries and fringe benefits | $44,000 |
| Rental of the building | 7,000 |
| Depreciation of equipment | 6,000 |
| Utilities | 2,000 |
| Materials for shoes (leather, nails, etc.) | 8,000 |

How much does Susie spend on each of the three factors of production? natural resources (raw materials), _____ human resources _____, and capital goods _____.

3a. What are the total expenses incurred for the production of the 20,000 pairs of shoes? _____

b. What is the cost to the firm for each pair of shoes? _____

4a. Considering the sales and various cost figures, what is the profit before taxes for each pair of shoes? _____

b. What is the total profit for selling all 20,000 pairs of shoes? _____

5. What is the net profit after business income taxes if all such taxes total $3,000? _____

6. What are some reasons why Susie might have invested the $35,000 in this firm? _____

_____

7a. Did Susie assume any risks? _____

b. Explain your answer. _____

_____

8. What is her after-tax rate of return on investment for the year if all Susie's profits are considered as a return on investment? _____

9. If Susie had invested her $35,000 in a special savings account and received $2,800 of interest, what would her return be for the year before taxes? _____

10a. Is it fair that she gained a far better return on the investment in her firm than from the savings account? _____

b. Why or why not? _____

11. What is the opportunity cost to Susie for having invested her money in the firm? _____

12. Suppose that Tom is a manager of a similarly sized shoe firm and makes $15,000. Also suppose that Susie lives on savings during the year, never drawing a salary. Considering these facts, is Susie's return adequate? Explain your answer. _____

_____

_____

13. When evaluating a "profit" rate, what must be considered? When is a profit rate adequate? _____

_____

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# Lesson 10: Why Do Businesses Use Credit?

TIME REQUIRED: At least two class periods, 45–50 minutes each

RECOMMENDED GRADE LEVEL: 9–12

MAJOR CONCEPTS: Specialization
Supply and demand
Market
Profit
Costs of production
Investment

**Instructional Objectives:** Students will
- Provide an example of specialization of labor;
- Compute annual interest cost;
- Explain why use of credit can lead to increased profitability;
- Explain how consumer demand affects the supply of goods and services;
- Compute the costs of production;
- Describe the difference between a partner and an employee;
- List the risks of a new business venture;
- Describe the trade-offs for a business that uses credit.

**Rationale for the Activity:** Consumers often use credit to purchase a good or service because they do not have enough ready cash. Business managers often use credit because it can lead to their earning more profit. This case study shows why managers and owners believe the use of credit can improve profit prospects for their firms.

**Materials:** Multiple copies of handouts 10-1, 10-2, and 10-3.

**Procedure:**
1. Conduct a brief discussion as to why consumers use credit. Ask students why they believe businesses use credit. List the reasons on the chalkboard.
2. Provide each student with a copy of Handout 10-1. Have students read the case study individually or in groups and answer the questions associated with it. Discuss the answers briefly with the class.
3. Distribute copies of Handout 10-2 (Part II of the case study). Explain that Ralph has made some decisions and wants to employ a recent high school graduate who has skill in furniture refinishing. Students are to read Handout 10-2 and answer the questions on it. Discuss the answers briefly with the class.
4. Distribute copies of Handout 10-3 (Part III of the case study). Explain that Ralph has a new problem. Since he does not have enough cash to buy the equipment needed, he is considering getting a loan from a bank. Students are to read Part III, and, using information generated in parts I and II, answer the questions about Part III.
5. Conclude the lesson by reviewing the objectives of the lesson as a focus for class discussion.

**Evaluation:**
1. Assess quality of student contributions to class discussion.
2. Assess quality of student responses to case study questions.

**Teacher Answer Sheet to the Case Study: Ralph and His Woodshop**

**PART I**
1. Because of the demands of customers and with the expectation of earning more income.
2. Yes, that's how an economy based on a free or considerably free market functions (except when radically new products are introduced).
3. Ralph makes wooden chairs only. He does not, for example, refinish furniture, make stuffed furniture, or build tables.
4. A partner is a part owner of the firm and shares the risk and profits; an employee is someone who receives wages in return for work.

**PART II**
1. More space and utilities (gas, electricity, etc.) will be needed because two people will be working rather than only one, and they will need storage areas for refinished goods.
2. $160 per week; $8,000 per year (50 weeks worked).
3. 50 weeks × 40 hours a week = 2,000 hours.
   $1,000 for fringe benefits divided by 2,000 hours = 50 cents a hour.
   $4 direct salary plus 50 cents equals $4.50 an hour.
4. Ralph needs to cover the fringe benefits of his employee, the extra rent, necessary materials, depreciation on equipment, and any other costs. In addition he hopes to make a profit on his new investment plus a return on the extra risk he has assumed by hiring the worker so as to be able to expand the business.

**PART III**
1.

| | |
|---|---|
| Gross wages to employee (50 weeks' work) | $ 8,000 |
| Fringe benefits plus social security | 1,000 |
| Additional utilities | 300 |
| Additional rent | 500 |
| Additional materials | 2,000 |
| Depreciation of equipment | 1,500 |
| Interest on debt | 750 |
| Total estimated expenses | $14,050 |

2. $ 9.50 × 35 = 4750 + 2850 = $332.50 per week

   $332.50 × 50 = $16,625.00 for a 50-week work year

3. $16,625 total revenue estimated
   −14,050 total expenses estimated
   $ 2,575 total estimated profit before taxes

4. Ralph invested $10,000 in the chairmaking segment of the business. He borrowed money from the bank for the refinishing equipment. Therefore, at the outset he did not invest any of his own money in the new venture. However, each year for five years he has, in effect, planned to invest $1,500, an amount equal to the repayment of the bank loan. Ralph will use some of his profit on the additional venture to pay back the loan, and if all goes well, at the end of five years his new investment will total $7,500, free and clear.
5. Credit may be used in order to generate additional profit. Ralph estimates that he will recapture the repayment and the interest expense plus some profit on the loan. He is making money on someone else's money—the bank's and the depositors' at that bank (in return for which he has paid them interest).
6. Assuming risk for the opportunity to gain more profits.
7. Perhaps his prices will be too high for many customers to buy his refinishing service. He will then be stuck with the higher rental of the building plus the interest and repayment costs of the loan. Also, his flow of raw materials may be interrupted (e.g., by a shortage of wood or paint-stripping fluid), or the worker he has hired may work too slowly or bungle too many jobs.
8. Good estimating is essential in determining whether one should embark on a new venture.

# Handout 10-1

## CASE STUDY: RALPH AND HIS WOODSHOP—PART I

Ralph has always enjoyed working with wood and for years has made furniture. Finally, he decided to start a business that produces wooden chairs. During the first year he made more than 1,000 chairs, all of them to the specifications of his customers. He employs no workers. He invested $10,000 in the business. He earned approximately $15,000 for the year, after expenses.

His customers tell him that there is a big demand for a furniture refinishing service, and many have asked him to do refinishing. His reply has always been, "I'm sorry, but I am in the business of making chairs, not of refinishing furniture."

Ralph wonders whether he should fill the demand and bring a furniture refinisher into the business. He also wonders if he should hire someone to do the work or if he should bring in a partner who is a skilled furniture refinisher.

**Questions:**

1. Why is Ralph considering diversifying by adding a furniture refinishing service?
2. Are the amounts and variety of goods and services that businesses produce for the marketplace generally in response to consumer demand?
3. How does Ralph's operation show specialization of labor?
4. What is the difference between a partner and an employee?

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary)*, 1979. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

# Handout 10-2

## CASE STUDY: RALPH AND HIS WOODSHOP—PART II

Ralph decides to add furniture refinishing to his business. He also decides to hire an employee rather than share ownership with a partner. Ralph estimates the following annual expenses of hiring the new employee:

| | |
|---|---|
| Social security and fringe benefits for hiring an employee | $1,000 |
| Additional utilities needed | 300 |
| Additional rental space needed | 500 |
| Additional stain, shellac, sandpaper, and other materials | 2,000 |

Ralph estimates that he can hire a recent high school graduate for $4 an hour, not including social security and fringe benefits. He plans to charge customers $9.50 an hour for labor for the refinishing work done by the employee. Ralph will also need to purchase extra equipment for use by the new employee, but he is not sure what it will cost.

**Questions:**

1. Why will the utilities and rental space cost more?
2. How much weekly gross pay will the employee earn in a 40-hour work week? How much will the employee earn in a 50-week work year?
3. If the employee works 50 weeks a year at 40 hours a week, what is the hourly cost to Ralph including fringe benefits?
4. Why does Ralph charge the customer more for the services of his employee than he pays directly to that same employee?

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# Handout 10-3

## CASE STUDY: RALPH AND HIS WOODSHOP—PART III

Ralph went ahead and hired his new employee. He now has a new problem. He has found that the new furniture refinishing equipment will cost $7,500. Unfortunately, Ralph does not have the $7,500 to buy the new equipment. He has located a bank that will give him a five-year $7,500 loan at 10 percent a year. At the end of the first year, he will need to pay back $1,500 of the loan plus a year's interest. Ralph estimates that his equipment will depreciate by $1,500 in the first year. Depreciation is normally counted as a business expense. Ralph has some new questions to answer before he gives the bank an answer. Should Ralph borrow $7,500?

**Questions:**

1. What are the total estimated annual expenses associated with hiring the new employee? Fill in the blanks:
   - Gross wages to employee for 50 weeks of work _____
   - Fringe benefits plus social security _____
   - Additional utilities _____
   - Additional rental _____
   - Additional materials _____
   - Depreciation of equipment _____
   - Interest on debt _____
   - Total _____
2. Ralph estimates that he will be able to charge his customers $9.50 for labor for 35 of the 40 hours that his new employee works per week. The other five hours will be devoted to coffee breaks, cleaning up the shop, doing some clerical chores, giving estimates for work, and other odd jobs. If Ralph's estimates are correct, how much revenue will be generated by his new employee for a 50-week work year?
3. How much profit will Ralph make on this new refinishing venture if his estimates are correct?
4. How much did Ralph plan on investing of his own money in this new venture?
5. What does this show about why businesses use credit?
6. What is the trade-off Ralph makes by using credit for this new venture?
7. What risks is Ralph assuming? Explain how his estimates could be wrong.
8. Why do you think a business manager such as Ralph should make all of these cost estimates before plunging into a new venture?

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# Lesson 11: Some Factors in Corporate Investment Decisions

*TIME REQUIRED: 45–50 minutes or one class period*

RECOMMENDED GRADE LEVEL: 9–12

MAJOR CONCEPTS: Investment choice
Profit maximization
Short-run
Long-run
Capital goods

RELATED CONCEPTS: Opportunity cost
Rate of return
Interest
Taxation
Risk

**Instructional Objectives:** Students will
- Define the terms *investment* and *capital goods*.
- Tell why some firms may tend to prefer short-run profits rather than long-run profits derived from investment in new capital goods.

**Rationale for the Activity:** Corporate executives constantly make decisions as to whether they should invest in new plant and equipment. Investment decisions are based on the expectation of earning a profit on the financial resources invested in physical capital (plant and equipment). The profit must be large enough for the firm to be able to continue production at an adequate profit in the long run. Every investment and other business decision is made in terms of selecting the most profitable opportunities available at that time. This activity illustrates that sometimes the trade-off is between short- and long-run profit goals. Such trade-offs may involve differences between the goals of top management officials and lower management.

**Materials:**
1. Newspaper article from the *Wall Street Journal* (Handout 11-1)—one copy for each student.
   NOTE: This newspaper article describes the investment climate as of June 1977. The climate may not be the same when this lesson is taught. If the investment climate is different, the lesson should be suitably modified or else the new climate can be contrasted with that prevailing in mid-1977.
2. Multiple copies of Handout 11-2.

**Procedure:**
1. Provide each student with a copy of Handout 11-1 and have them read the article. You may wish to prepare a glossary of words in the article that may cause your particular group of students difficulty.
2. *When students have completed a first reading of* the article, give them Handout 11-2 and ask them to write down answers to the questions.
3. Focus class discussion on the questions asked.

**Evaluation:** Assess quality of student responses to questions on Handout 11-2.

**Teacher Answer Sheet for Handout 11-2**
1. Uncertainties about the future seem to have led to greater reluctance to make long-term investment commitments. An important reason for this reluctance is that bonuses, promotions, and even the survival of managers of the company are importantly governed by the rate of return on assets. Since making long-term investments tends to depress that rate of return until the new facilities go into production, in times of uncertainty there is greater than the usual reluctance to lower short-term returns in order to raise returns in the future.
2. When corporations invest large sums in new plant and equipment, hoping for future profits, the present *rate of return* on capital may be lower because of the added capital investment even though the *amount* of profit is the same or even a little higher. Therefore, an emphasis on "fast profits" (a high rate of return right now) will mean a reluctance to add to capital spending.
3. If this behavior becomes widespread economists fear that economic growth will be retarded because of lack of enough investment in new or more efficient machines.
4. Chief executives place more importance on long-term growth. They may be willing to take risks by making long-term investments in new plant and equipment. They expect these investments to give the firm high rates of profit in the future and are therefore willing to live with a lower rate of return in the short run. Below the top echelon, managers place more store on obtaining bonuses and promotions based on high current rates of return, and they therefore may be more reluctant to take the risk of making long-term investments. They would rather spend more on activities that promise to return a quick short-term profit, such as advertising or improving a company's marketing methods. If the latter types of spending work, profits will go up soon and thus quickly lead to higher salaries and bonuses for managers.

# Handout 11-1

*Avoiding Risks*

## STRESS ON FAST PROFITS CALLED A KEY DETERRENT TO CAPITAL SPENDING

### Economists Say Companies Overdo Return on Assets, Measure Executives by It

### Licking Chops Over Bonuses

By Ralph E. Winter
Staff Reporter of *The Wall Street Journal*

The chief executive looks down the long table at a dozen vice presidents and other top officials of his billion-dollar company.

"I've been telling you people that we should be investing more in new plants," he says. "With prices going up the way they are, it will cost us a lot more later when we do build."

Like many other major companies, this big industrial-products concern has made return on assets employed the major yardstick in measuring corporate progress and executive performance. Bonuses, promotions, and even an executive's survival in the company have been tied to achieving a high profit percentage on the capital employed in his particular part of the business. Understandably, executives from division heads up to presidents have become reluctant to make big capital outlays for fear of reducing, at least temporarily, that key percentage.

**A Brake on Spending?**

Some businessmen, bankers and economists think this emphasis on return on investment is one reason why corporate capital spending has been so slow to recover after the 1974-75 recession. Last year, for instance, capital spending by corporations rose only about 6.8%, little more than the rate of inflation. By contrast consumer spending last year jumped about 11%.

This spending caution has been an important factor in delaying a complete recovery from the recession, many economists say. The economy appears to be picking up nicely now, and there are indications that capital spending finally is rising more rapidly too. Estimates for 1977 outlays range from about $135 billion to more than $140 billion, up from 1976's $120.5 billion.

But when the Commerce Department this week projected 1977 capital spending at $135.34 billion, a government economist observed that "business investment simply isn't as strong as we would like."

Capital-goods producers say there is still a great deal of caution about launching major new plants or even large expansions. Much of the current outlay is for modernization and cost reduction, or to meet environmental requirements, with some modest capacity expansion frequently involved.

**Regulatory Uncertainties**

Corporate executives say concern about return on investment has been heightened by frequent changes in government regulations and inflated plant-and-machinery costs.

"Many executives are still willing to take business risks," says Arthur W. Harrigan, executive vice president, finance, of International Paper Co. "But a lot of the uncertainty currently is politically erected, whether about tax credits or environmental controls. Businessmen aren't as confident about taking political risks."

Another reason why the paper industry is "making haste more slowly" in expansions, Mr. Harrigan says, is that the much larger amounts of capital required for a major expansion have greatly increased the risk.

Some economists and businessmen think capital outlays will continue to be relatively conservative unless there is a change in corporate philosophy They worry that a whole generation of executives may be developing an excessive preoccupation

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with managing present assets for maximum return, and have become unwilling to take risks needed for growth. The ultimate result could be slower long-term economic growth, capacity shortages and more persistent unemployment.

### Steel Companies Hold Back

A capacity pinch could show up in basic steel during the next decade, for instance, because of reluctance of steel companies to invest in major expansions, some steel users say. Steel producers looking at their return on assets invested in steel plants don't like what they see, and hence aren't pouring in the massive sums needed for new plants.

Armco Steel Corp. will add capacity to produce electrical steels, a specialty product, but "we don't anticipate adding to our other steelmaking facilities until such time as steel products are again profitable," says William Verity, chairman. National Steel Corp. has repeatedly postponed start of construction of a $700 million raw-steel facility because profit on existing steel operations isn't deemed to be high enough.

Obviously, expansion that is recklessly aggressive can be worse than preoccupation with return on investment. Almost everyone agrees that initially the concentration on earning maximum return on assets was a healthy change at many companies. In many corporations during the late 1960s and early 1970s, the emphasis was on growth in sales, and executives assumed that higher earnings would follow.

It eventually became clear that the profit assumption wasn't necessarily sound. Companies were making many products that were only marginally profitable, hoping that markets would strengthen eventually. Corporate debt rose ominously as companies built new facilities and increased inventories to support big sales increases.

When top management began demanding better profits on each dollar invested in the business, marginal divisions and unprofitable products were pared away, prices were boosted on low-earning items, inventories were slashed and receivables were policed more rigorously. Capital spending was rationed more carefully.

Recently, though, some company officials have begun to worry that the return-on-investment concept has been pushed too hard. Emphasis on the most profitable product lines and overcautiousness about outlays on new ventures, these critics say, can severely limit a company's future.

The problem, from the viewpoint of a division manager, is that investment in new projects or new plant and equipment frequently doesn't produce a significant return for several years—if ever. The manager fears that his reputation will be seriously damaged by several years of lower returns on assets if there is any delay in getting the new operation up to satisfactory profitability. Meanwhile, too, the manager and his associates will receive lower bonuses while waiting for the new venture to pay off.

### Taking Fewer Chances

"You get the feeling that the reward for successful expansion isn't worth the risk of failing to produce an adequate return," says one corporate group vice president. "If top management wants a good return on investment above all else, that's what they'll get. But people at my level are going to take fewer chances."

"You can build yourself a trap if you put too much emphasis on return on investment," says Joseph T. Bailey, chairman and chief executive of Warner & Swasey Co., a producer of machine tools, construction equipment and textile machinery. It is difficult, he adds, to operate an incentive program based on return on investment without having people hold down assets employed, instead of making needed long-term investment.

# Handout 11-2

## WILL CORPORATIONS INVEST?

1. How does uncertainty about the future seem to have influenced corporate investment decisions?

2. Why will emphasis on "fast profits" tend to reduce corporate capital spending?

3. Why were some economists worried that "a whole generation of business executives may be developing an excessive preoccupation with managing present assets for maximum return"?

4. According to the article, how do the goals of corporate chief executives sometimes differ from the goals of middle managers and other salaried employees?

NAME _____ DATE _____

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# Lesson 12: Market Simulation—The Big Apple*

TIME REQUIRED: Two or more class periods

RECOMMENDED GRADE LEVEL: 9–12

MAJOR CONCEPTS: Supply
Demand
Market price
Competitive markets

RELATED CONCEPTS: Graphs
Profit
Inflation
Equilibrium price

**Instructional Objectives:** Students will

- Experience what it is like to be buyers and sellers in a competitive marketplace;
- Make generalizations about and discuss the nature of the competitive marketplace;
- Observe that prices tend to move toward equilibrium in a competitive marketplace;
- Describe how supply and demand influence prices;
- Construct a bar graph.

**Rationale for the Activity:** The game is designed to convey to students the experience of buying and selling in a competitive market. Although most product and service markets are not as competitive as the apple market used in this activity, students can begin to understand how prices are generally determined in any market. Understanding how the forces of supply and demand generate market prices will help students explain why some products have relatively high prices and others have relatively low prices.

**Materials:**

1. Informational chart (Handout 12-1).
2. 36 buyer and 36 seller cards (see Figure 12-1 for instructions).
3. Individual score sheets—two per student (Handout 12-2).
4. Big Apple classroom transaction record sheet—one per class (see Figure 12-2 for instructions). Reproduce on chalkboard.
5. Bar graph worksheets—one per student (Handout 12-3).
6. This activity requires a class of at least 25 students to be effective. Up to 50 or 60 students may be involved if the room is large enough.

**Procedure for Rounds 1, 2, and 3:**

1. Clear center of room and designate it as the marketplace.
2. Select one student to be keeper of the Big Apple cards (Figure 12-1).
3. Select one student to record all transactions on the Big Apple classroom transaction record (Figure 12-2). We recommend that you reproduce the record sheet on the board for everyone to see.
4. Divide class into two equal groups. One group will be sellers; one group, buyers. Explain that buyers will be buyers throughout the game, and sellers will be sellers throughout the game. Explain that when a seller finds a buyer and agrees on a price, *the seller* goes to the Big Apple Market tally sheet and records the deal. Then both the seller and buyer get new cards from the keeper of the Big Apple cards and re-enter the marketplace. (It is a good idea to have the keeper of the cards located in the same part of the classroom where the Apple Market tally sheet is located.)
5. Explain that buyers and sellers can buy/sell in multiples of $5.00 and $10.00 only.
6. Hand out individual tally sheets (Handout 12-2) and request that each participant record his or her transactions as they are made. Review details on the tally sheet if necessary.
7. Explain that the goal of both buyers and sellers is to make a profit.
8. Explain that you will conduct three rounds of trading sessions of 10 minutes each. Announce to the students when one minute remains in each round. (Trading time may be reduced to accommodate short class periods so long as each round runs for the same length of time.)
9. After each trading round, allow students time to figure their net losses or gains.
10. Encourage students to make as many deals as they can in the time permitted. Explain that it is permissible to take a loss in order to get a new Big Apple transaction card. Try not to give away the fact that the students who will have the highest profits are usually those who engage in the most transactions. This fact will be "discovered" during the discussion following completion of the game (Procedure 12).
11. During nontrading time between round 1 and round 2, direct students' attention to the market record on the Big Apple classroom transaction record. Say that it contains useful information for them. *Do not elaborate.*
12. Conduct postgame discussion:
    a. What is the price the apples are most fre-

* The Big Apple Game is reproduced with some minor editorial changes from *In the Marketplace: A Basic Unit on the American Economic System*, by permission, Office of the Superintendent of Public Instruction, State of Washington, Olympia, Washington 98504 (1976). Some ideas reflected in this activity were generated by using the *Economics in Society Staff Training Kit* by Suzanne Wiggins Helburn and James E. Davis (Reading, Mass.: Addison-Wesley Publishing Company, 1976).

quently sold at in Round 1? Round 2? Round 3? (Examine data.)

b. In which round was there the greatest spread in price? (Examine data.)
c. Why did the prices become more clustered? (Answer: Increasing competition is the most important cause for the clustering of prices. This phenomenon represents the tendency of a competitive market to move toward an equilibrium price.)
d. Who determined the "market price" for apples, buyers or sellers? (Answer: *Both* buyers and sellers interacting in the marketplace.)
e. How did supply and demand (sellers and buyers) influence price? (Answer: Sellers tried to get higher prices, buyers tried to get lower prices. Because there was competition among members of each group no one had control over the price.)
f. Why were some students able to make more total profits than others? (Probable answer: They were able to conclude many transactions, each of which yielded a small profit.)

**Procedure for Round 4 (second day):**

1. This round is identical to the first day's play except that the number of seller cards of each denomination used in the game is cut in half. Also, deals must take place within five minutes.
2. Allow time to record gains/losses.
3. Postgame discussion:
   a. Did prices go up or down? (They should have gone up.)
   b. Why did the prices change as they did?
   c. Can the students relate this price change to price behavior in the national economy?

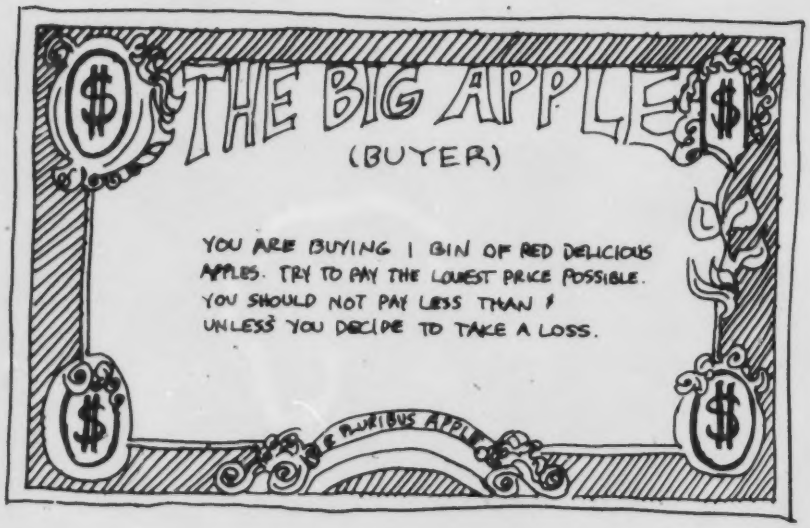
**Procedure for Round 5:**

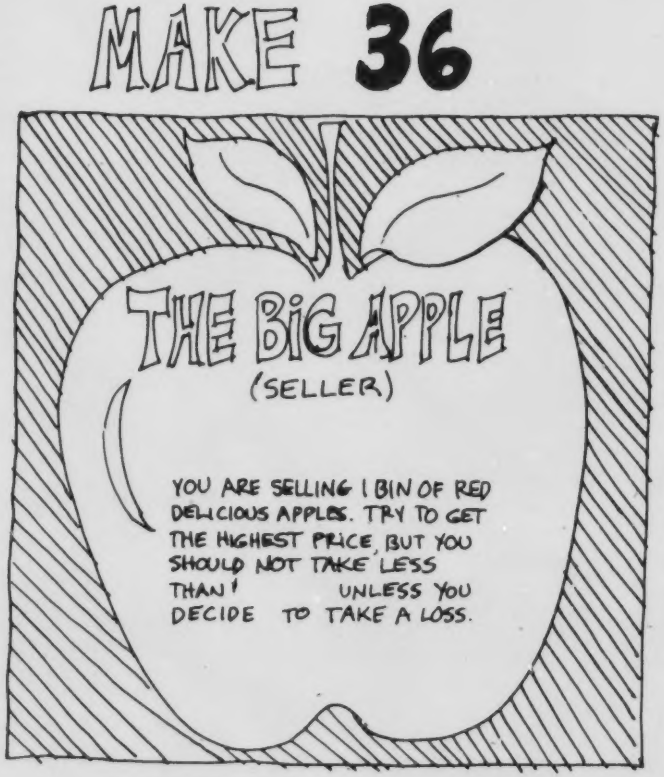
1. Put in as many seller cards as in first three rounds but cut the number of buyer cards of each denomination in half and follow the same directions as in Round 4.
2. Deals must take place in 5 minutes.
3. Allow time to record gains/losses.
4. Postgame discussion (may require a third class period):
   a. Did prices go up or down during Round 5? (They should have gone down.)
   b. Does this suggest a method of reducing inflation? How might it be accomplished? What negative effects could occur using this method? (Answer: Loss of jobs; loss of income for business.)
   c. Have students graph market deals for rounds 3, 4, and 5, and write generalizations about what the graphs show (use Handout 12-3).
   NOTE: Compare market record sheet for all three versions of the Big Apple Market Game as you hold discussion.
   d. Review answers to worksheet questions:
      (1) Price equilibrium (price at which most transactions take place) occurs between $50–$65.
      (2) Equilibrium price tends to go up when an item in demand is scarce, as in Round 4 (fewer sellers relative to buyers).
      (3) Equilibrium price tends to drop when an item is in oversupply, as in Round 5 (fewer buyers relative to sellers).
   e. The class is now ready to discuss external forces (monopoly power, government regulations) on the competitive market. A question to consider overnight could well be: How does the apple market used in this game differ from markets in the real world?

**Evaluation:**

1. Assess quality of student response to postgame questions. Try to avoid grading based upon the amount of profit each student earned.
2. Optional: Use the overnight thought question—How does the apple market used in this game differ from markets in the real world?—as a written assignment instead of as a focus for oral discussion.

## Figure 12-1


MAKE 36
THE BIG APPLE
(BUYER)
YOU ARE BUYING 1 BIN OF RED DELICIOUS APPLES. TRY TO PAY THE LOWEST PRICE POSSIBLE. YOU SHOULD NOT PAY LESS THAN $1 UNLESS YOU DECIDE TO TAKE A LOSS.
MAKE: 4 BUYER CARDS
AT: $90, $80, $30, $20
(16 CARDS)
5 BUYER CARDS
AT: $70, $60, $50, $40
(20 CARDS)


MAKE 36
THE BIG APPLE
(SELLER)
YOU ARE SELLING 1 BIN OF RED DELICIOUS APPLES. TRY TO GET THE HIGHEST PRICE, BUT YOU SHOULD NOT TAKE LESS THAN $1 UNLESS YOU DECIDE TO TAKE A LOSS.
MAKE: 4 SELLER CARDS
AT: $100, $90, $40, $30
(16 CARDS)
5 SELLER CARDS
AT: $80, $70, $60, $50
(20 CARDS)

# Figure 12-2

## BIG APPLE CLASSROOM TRANSACTION RECORD

(reproduce on chalkboard)

| Price | ROUND 1 (10 minutes) | ROUND 2 (10 minutes) | ROUND 3 (10 minutes) | ROUND 4 (5 minutes) | ROUND 5 (5 minutes) |
|---|---|---|---|---|---|
| $100 | | | | | |
| 95 | | | | | |
| 90 | | | | | |
| 85 | | | | | |
| 80 | | | | | |
| 75 | | | | | |
| 70 | | | | | |
| 65 | | | | | |
| 60 | | | | | |
| 55 | | | | | |
| 50 | | | | | |
| 45 | | | | | |
| 40 | | | | | |
| 35 | | | | | |
| 30 | | | | | |
| 25 | | | | | |
| 20 | | | | | |

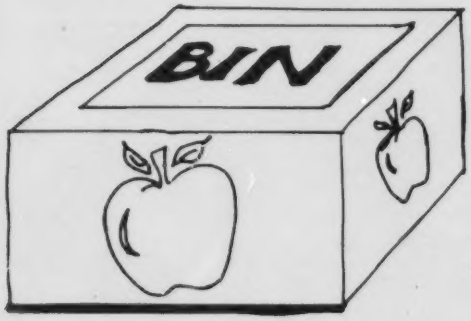
*Directions for Recorder:* place "hash marks" (e.g., 𝍸) beside the agreed-upon price when the seller reports it to you. Only one hash mark should be recorded for each transaction.

# Handout 12-1

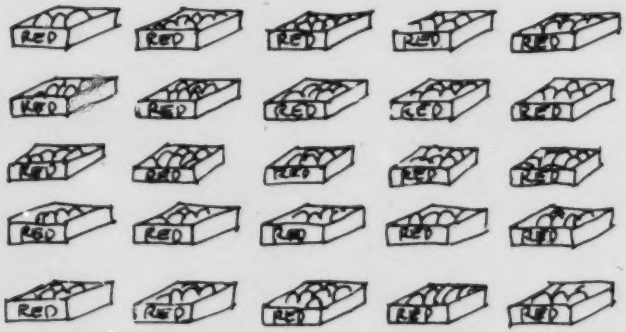
## THE BIG APPLE
INFORMATIONAL CHART

(Post in Room) 24 x 36

AFTER THEY COME FROM THE ORCHARD, APPLES ARE PLACED IN BINS AT A WAREHOUSE.




=




EACH BIN = 25 BOXES OF APPLES

EACH BOX WEIGHS APPROXIMATELY 40 lbs.

BUYERS & SELLERS MEET AT THE MARKETPLACE FOR COMMODITIES TO MAKE DEALS IN APPLES.

QUESTION: HOW MUCH DOES A BIN OF APPLES WEIGH? 1,000 lbs. IF YOU COULD SELL THE APPLES FOR 10¢ A lb. HOW MUCH WOULD YOU GET? IF YOU THINK THE ANSWER IS $100.00, YOU'RE READY FOR THE BIG APPLE!



From *In the Marketplace: A Basic Unit on the American Economic System*, Office of the Superintendent of Public Instruction, State of Washington, Olympia, Washington (1976). Reprinted, with modifications, by permission.

# Handout 12-2

## INDIVIDUAL SCORE SHEET—BIG APPLE

Circle One: BUYER SELLER NAME _____

*Directions:* For each transaction, when you get a card enter the price in column II. After you make a transaction, record the price in column III of the same row. You tally the gains, losses, and totals at the end of the game. Tally your losses and gains by taking the difference between your transaction price and the price on your card for each transaction. For example, if a seller sells at a price higher than the price on his card, he makes a gain; if lower, he takes a loss. If a buyer buys at a lower price than his card price, he makes a gain; if higher, he takes a loss. Ignore the break-evens. Total up your gains and losses and mark them in the appropriate places at the bottom. Your net gain or loss is the difference between the sum of the gains and the sum of the losses. Indicate where rounds 1, 2, and 3 ended by a mark.

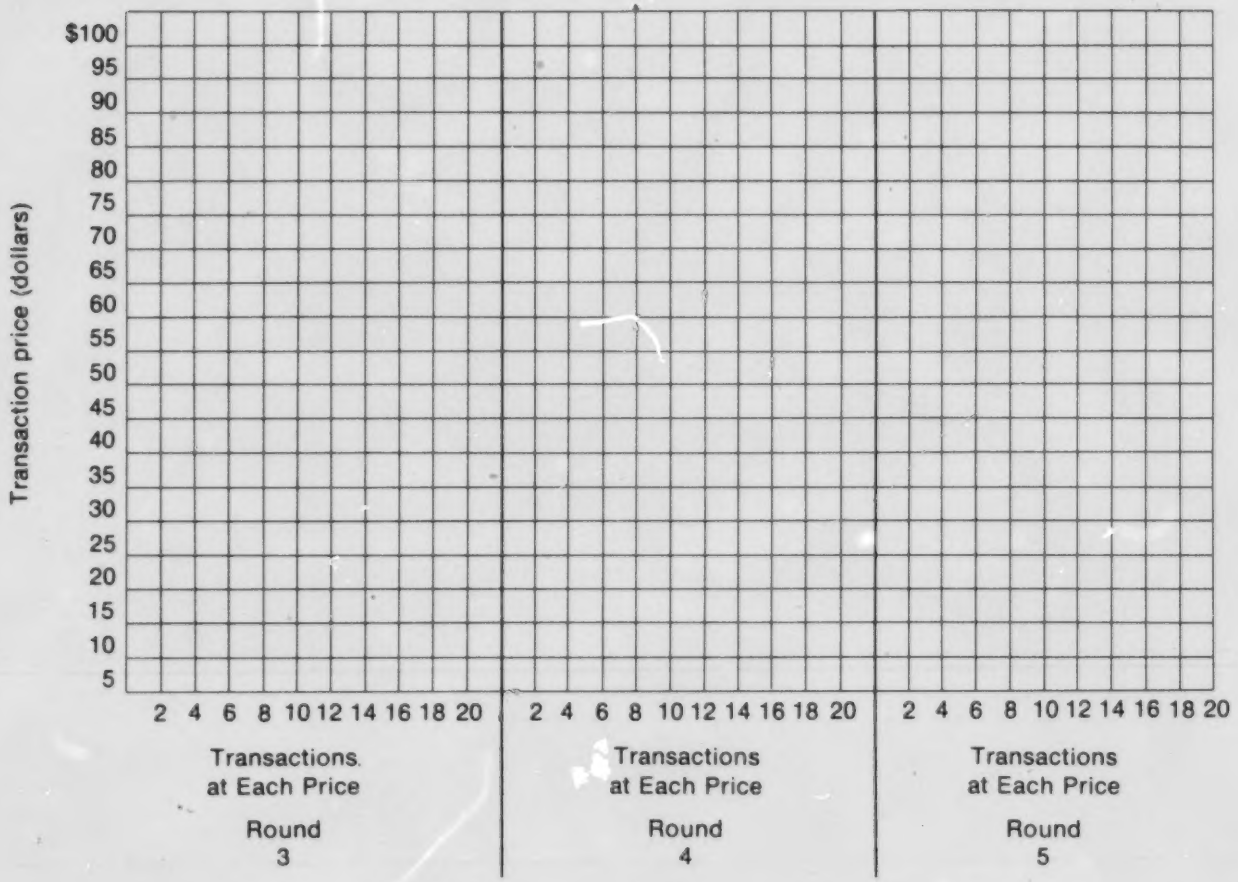
| **Transaction Number** (I) | **Price on Your Card** (II) | **Transaction Price** (III) | **Gains** (IV) | **Losses** (V) |
|---|---|---|---|---|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | | |
| 13 | | | | |
| 14 | | | | |
| 15 | | | | |
| 16 | | | | |
| 17 | | | | |
| 18 | | | | |
| 19 | | | | |
| 20 | | | | |

Total number of transactions _____ Total gain _____ Total loss _____ Net Gain/Loss (Circle one)

# Handout 12-3

## BAR GRAPH WORKSHEET: THE BIG APPLE

DIRECTIONS: Translate information from the classroom tally sheet into bar graph form. (Note: This is a *horizontal* bar chart.)




**QUESTIONS:**

1. At what price did most transactions take place? Round 3? Round 4? Round 5?
2. What effects do changes in supply and demand have on price?

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary)*, 1979. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

# Lesson 13: An Evaluation of Income Tax Provisions

TIME REQUIRED: 45–50 minutes

RECOMMENDED GRADE LEVEL: 9–12

MAJOR CONCEPTS: Opportunity costs
Trade-offs
Redistribution of income

RELATED CONCEPTS: Income distribution
Fiscal policy

**Instructional Objectives:** Students will

- Establish priorities among seven tax proposals;
- Justify their priorities by explaining the benefit of each of the seven tax advantages and their relative importance.

**Rationale for the Activity:** Proponents of income tax reform argue that the basic tax rate paid by all taxpayers could be lowered if fewer tax advantages such as special exemptions and deductions were allowed. However, individuals who benefit from a particular tax advantage usually resist its elimination even while they advocate closing other tax "loopholes." Furthermore, most tax advantages are designed to accomplish some social or economic goals regarded as desirable. It seems to be the case that the number of tax advantages can only be reduced by deciding that some goals are more important than others and that the less important goals must be sacrificed.

**Materials:**

1. A copy of Handout 13-1 for each student.
2. Seven sheets of paper marked A through G in large letters.

**Procedure:**

1. Give each student a copy of Handout 13-1. The students read the case study and then rank the items according to the instructions given.
2. Tape the seven numbered pieces of paper to the wall or place them in widely separated places on the floor. Once students have completed their rankings, ask them to stand by the letter of the item that each ranked first. Then ask several students to explain why they ranked that item first. Additional discussion can be generated by asking questions such as the following:
   a. If the provision you ranked first is adopted, how will it influence the distribution of income?
   b. What is the opportunity cost associated with your ranking if only one of the provisions can be adopted?
   c. What are some of the trade-offs you used in deciding which items have priority over others?
3. You can repeat the process described in procedure 2 by asking students to stand by their lowest priority item. Adjust the follow-up questions accordingly.
4. An alternative sorting of priorities can be arranged by using the numbers to represent ranks rather than tax provisions. Using the same priorities that were generated in procedure 1, select one tax provision such as provision E, and ask students to stand by the *rank* which they gave that tax provision. With the new sorting, ask students to reflect on how the group feels about the priority of that tax provision.
5. When the students are back in their seats, give them a chance to change their rankings if their opinions have changed as a result of the discussion. Clarify with students the criteria with which they established priorities. Some students will have used personal goals, others may have used national goals, and still others may have priorities according to the values of special-interest groups.

**Evaluation:**

1. Assess quality of student contribution to class discussion.
2. Ask students to write down at least one reason why each of the seven propositions could be considered a good law and one reason why each of the same seven propositions could be considered a bad law.

# Handout 13-1

## CASE STUDY—THE FEDERAL TAX POLICY COMMISSIONER'S DECISION

It is the policy of the United States government (and of other tax jurisdictions) to allow certain categories of taxpayers to reduce the amount of income tax they must pay in order to give them help with special problems or to encourage them to engage in certain activities. Below are listed several tax advantages. Some are in effect; others have been proposed. The use of each of such tax advantages either reduces the amount of money that the federal government receives or makes it necessary for other taxpayers to pay more than they otherwise would. You have just been appointed to serve on a tax policy commission. As a commissioner you must evaluate seven proposals. In judging, you will try to decide what the government accomplishes by allowing taxpayers in each category to reduce the amount of taxes they pay. The commission chairperson has asked each commissioner to rank the proposals in order of their importance. You will soon be asked to explain your rankings.

A. A provision that homeowners may deduct from their taxable income the money they pay for local property taxes and the interest they pay on their home mortgages.
B. A provision that parents receive an exemption of $1,000 for each child they support.
C. A provision that enables parents with children in college to pay less in taxes to help offset tuition costs.
D. A provision that all parents whose jobs make it necessary for them to pay for child care while they are at work pay less in taxes.
E. A provision that people over the age of 65 take an extra personal exemption from their gross incomes and thereby pay less in income taxes.
F. A provision that a married couple whose income is less than $8,000 a year and who have at least one dependent need not pay any income taxes.
G. A provision that corporations and other businesses pay less in income taxes if they invest money in new plants or equipment in locations where unemployment is high.

By placing the appropriate number in the space provided, rank the tax provisions listed above in order of their importance to you.

| | *Rank* | *Tax Provision* |
|---|---|---|
| MOST IMPORTANT | 1 | _____ |
| | 2 | _____ |
| | 3 | _____ |
| | 4 | _____ |
| | 5 | _____ |
| | 6 | _____ |
| LEAST IMPORTANT | 7 | _____ |

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary)*, 1979. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

# Lesson 14: Government Regulation: Effects on Business Decisions

TIME REQUIRED: Two class periods, 45–50 minutes each

RECOMMENDED GRADE LEVEL: 9–12

MAJOR CONCEPTS: Government regulation
Trade-offs
Supply and demand
Cost

**Instructional Objectives:** Students will

- Describe how government regulation affects the workings of the market for various goods;
- Know the reasons commonly given for government regulation;
- Recognize the effects government regulation has on business and consumer decision-making;
- Recognize that various individuals and groups have differing values or interests which prompt different reactions to government regulation;
- List trade-offs associated with government regulation.

**Rationale for the Activity:** Government intervention and regulation are often viewed primarily from the standpoint of the consumer. To broaden perspective, the following case studies focus on some of the effects of government regulation on business.

**Materials:** One copy of handouts 14-1 and 14-2 for each student.

**Procedure:**

1. To start students thinking about government regulation, pose the following questions for discussion:
   a. What is government regulation?
   b. What are some examples of government regulation?
   c. Is government regulation necessary?
   d. Do you feel government regulation is by and large beneficial or is it harmful?
2. Provide each student with a copy of Handout 14-1. Divide the class into small groups and give each group 15 minutes to complete the questions. Leave enough time for 15–20 minutes of class discussion. One person from each group might be asked to give an oral summary of the answers generated by his/her group.
3. On the second day, provide each student with a copy of Handout 14-2 and repeat procedure 2. This case may also be used as a one-night homework assignment, leaving more time for class discussion on the second day.

**Evaluation:**

1. Assess quality of student contributions to group and class discussion.
2. Assess quality of student answers to questions accompanying the case studies.
3. OPTIONAL: Use Handout 14-2 as an examination rather than as a stimulus and guide to class discussion.

**Teacher Answer Sheet to the Case Study: Slinky Sleepwear (Handout 14-1)**

a. There seemed to be sufficient demand to make the production and sale of sleepwear of Xlon highly profitable. Prospective profits were probably so attractive that the company invested heavily in special machinery to make sleepwear from Xlon.
b. In the short run, profits would fall because the banned garments that have already been produced by the company cannot be sold in the domestic market. The amount of profits lost will depend on the number of garments already produced but not sold. It would take time for the company to shift to other fabrics. Meanwhile, competitors may take customers away.
c. The competitors will increase their sales and probably increase their production too. Consumers of Slinky Sleepwear products would now be the competitors' prospective customers.
d. The protection of consumers was traded for lower profits in the short term for firms manufacturing the banned sleepwear. Since Xlon was the least expensive cloth for sleepwear, some consumers will pay higher prices for sleepwear in the future.
e. The decisions made by managers will depend on the circumstances. If all sleepwear manufactured by the company were made out of the flammable fabric, the loss incurred might be too much for the company to sustain and thus result in a dissolution of the business. If the company's production of sleepwear is quite diversified, it might just drop the banned products and continue the manufacture of the others. The company could introduce a new line of sleepwear to replace the banned one or start manufacturing an entirely new line of products such as women's blouses, underwear, etc.
f. Prices for sleepwear are likely to rise. How much depends upon the supply and demand conditions of the sleepwear market as well as on how much more the materials that can be substituted for Xlon cost.
g. The ban could result in some local unemployment if the Slinky Sleepwear Company closes down.

Employment in competitors' factories may increase.

h. Answers will vary depending on student values.
i. Answers will vary depending on student values.

**Teacher Answer Sheet to the Case Study: Sturdy Steel (Handout 14-2)**

a. EPA's requirement that Sturdy Steel install new equipment to end or reduce air pollution will cost money but will not increase the plant's steel output. The added costs might make the plant's steel so costly that, at prevailing prices, the sale of this steel would not return a sufficient profit or might even cause the plant to lose money.
b. The total costs of production would increase unless some other costs in the plant could be reduced to offset those associated with the new equipment. Profits might also decrease because of the higher costs of production. Much of what happens depends on the profit situation of the firm if the new equipment is purchased and on how high the profits of the Sturdy Steel Company were beforehand compared to those of other steel companies. If a number of steel plants or companies install similar equipment, the market price of steel might well go up.
c. The increase would probably be passed on, resulting in a higher price tag on automobiles. It might not be passed on if the manufacturers of cars and automobile dealers compensate for the increase by finding ways to make their operations more efficient. If auto prices rise, the purchasing power of the buyers to purchase other goods will tend to be reduced.
d. Cleaner air for residents at the possible cost of a decreased number of jobs in the community. In some cases the same people who will benefit from the clean air will lose a job. People who work in another city but live in Alwood may gain clean air without having the costs of a job loss.
e. If the plant closes down, the resulting unemployment will reduce the demand for goods and services at retail stores. Some people will leave town in order to find jobs elsewhere. The profit outlook for the retailers could therefore be bleak. That is why some retailers might oppose the ruling.
f. The doctor is looking at the situation from a health standpoint and approves the ruling because he hopes it will improve the community's health. Studies have proved that individuals who live in communities with considerable air pollution generally suffer more health problems—especially skin and lung diseases—than individuals living in less polluted environments. Thus, the doctor is concerned about the general welfare of the community and not his or her own income position. It is conceivable that the doctor would lose patients if the plant closes or if the equipment is installed and fewer people become ill, but the effect on the doctor's income would be relatively small.
g. The consumer pays higher prices for goods in order to enjoy cleaner air.
h. Because then businesses would be tempted to move to a state where antipollution requirements are less strict. Such a situation could result in a poor use of scarce resources. If the buildings and equipment that are left behind are not used by any other enterprise, resources that could still be productive will stand idle. In addition, business owners who move may produce in plants that contribute to air pollution in the new community. The result might be little or no reduction in the nation's total air pollution due to steel making.
i. Answers will vary depending on student values.
j. Answers will vary depending on student values.

# Handout 14-1

## CASE STUDY: SLINKY SLEEPWEAR

NEWSFLASH: THE CONSUMER PRODUCT SAFETY COMMISSION HAS JUST BANNED THE SALE OF SLEEPWEAR MADE OUT OF XLON. XLON IS THE MIRACLE FABRIC THAT CONSUMERS HAVE FOUND MUCH TO THEIR LIKING. IT NOT ONLY FEELS SOFT, IT CLEANS EASILY AND COSTS MUCH LESS THAN OTHER FABRICS. THERE HAVE BEEN SEVERAL REPORTS OF INDIVIDUALS WHO WERE BURNED, SOMETIMES FATALLY, WHILE WEARING SLEEPWEAR GARMENTS MADE WITH XLON. THE CAUSE WAS USUALLY HOT ASHES FROM CIGARETTES. TESTS HAVE SHOWN THAT XLON IS HIGHLY FLAMMABLE WHEN PRODUCED AS A SHEER FABRIC BUT WILL NOT BURN EASILY IF MADE INTO THICK CLOTH.

THE SLINKY SLEEPWEAR COMPANY, WHOSE MAIN PLANT IS IN DROWSY, ARIZONA, IS THE LEADING MANUFACTURER OF SLEEPWEAR USING THIS FLAMMABLE MATERIAL. COMPANY OFFICIALS ARE CONCERNED ABOUT THE IMPACT ON BUSINESS. IT WAS REPORTED THAT MILLIONS OF DOLLARS HAVE BEEN INVESTED BY THE COMPANY TO DEVELOP THE XLON FORMULA.

**Questions:**

a. What probably prompted the Slinky Sleepwear Company to manufacture Xlon sleepwear in the first place?

b. What is likely to happen to the profit picture for the Slinky Sleepwear Company in the immediate future?

c. How will the Slinky Sleepwear Company's competitors react to the news?

d. Who will benefit from the commission's ruling? Who will pay the costs? (In other words, what are the trade-offs?)

e. What decisions will the business manager(s) of Slinky Sleepwear have to make as a result of the ruling?

f. How might the ban affect prices for sleepwear?

g. How might the ban affect employment?

h. If you were a manager of Slinky Sleepwear Company would you support the ban on Xlon? Explain your answer.

i. If you were a consumer of Xlon sleepwear, would you support the ban? Explain your answer.

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary)*, 1979. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

# Handout 14-2

## CASE STUDY: STURDY STEEL

**Instructions:** Read the following news briefs and headlines and then answer the questions that follow.

*Alwood Blabber, April 6*
News item: The Environmental Protection Agency ruled that the Sturdy Steel plant in Alwood must install new equipment to cut drastically the air pollution caused by its furnaces. The estimated cost is $3 million. The new equipment must be installed within three years or the company will be penalized for noncompliance. The Alwood plant has 3,000 employees.

*Alwood Blabber, April 7*
**Sturdy Steel Company Executives May Close Alwood Plant**

*Alwood Blabber, April 8*
**Alwood Retailers Upset Because Sturdy Steel Plant May Close**

*Alwood Blabber, April 9*
**Local Doctor Endorses EPA Ruling as Health Measure**

**Questions:**

a. Why might the Sturdy Steel Company close its Alwood plant?
b. More specifically, if the company installs the equipment, what would be the effect on costs and prices?
c. What effect might an increase in the price of steel have on the price of automobiles to the consumer? What would this do to the purchasing power of the individuals?
d. What is the trade-off to the community if the company does close the plant? Who gains? Who loses?
e. Why are retailers in Alwood upset over the possible closing?
f. One of the doctors indicates that the ruling is a good one. Why do you think the doctor feels this way? Why might the doctor not agree with retailers about the wisdom of this ruling?
g. What is the trade-off for the consumer if steel prices are increased in the wake of EPA rulings like the one in this case?
h. Why must the federal government enforce pollution control? Why can't a state government enforce antipollution measures as well as the federal government can?
i. If you were a manager of the Sturdy Steel Company, would you support the Environmental Protection Agency ruling? Explain your answer.
j. If you were a consumer living in Alwood, would you support the EPA ruling? Explain your answer.

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# Lesson 15: The Cost of Consumer Protection

TIME REQUIRED: 1 to 3 class periods

RECOMMENDED GRADE LEVEL: 9–12

KEY CONCEPTS: Government regulation
Trade-offs
Cost-benefit

RELATED CONCEPTS: Supply and demand
Market price
Incentives

**Instructional Objectives:** Students will

- Understand the concept of trade-offs as it applies to consumer protection;
- Specify the costs involved in consumer protection;
- Describe varying philosophies regarding consumer protection.

**Rationale for the Activity:** Consumers and business managers must constantly decide whether a particular privately supplied good or service is worth buying. Services such as the "consumer protection" that is provided by government also cost money. In effect, we buy consumer protection through tax payments and through higher prices for goods and services. Consumers should evaluate whether the benefits of consumer protection are worth their extra costs. Cost-benefit analysis of such matters as consumer protection legislation is often controversial. One's position depends greatly on the value an individual places on freedom compared to safety, and on how much a person thinks safety is worth. When an individual weighs the costs versus the benefits of consumer protection, the process throws light on that person's own value system.

**Materials:** Multiple copies of handouts 15-1, 15-2, and 15-3.

**Procedure:**

1. Introduce the lesson by asking students to read the first case study (Handout 15-1) and answer the accompanying questions.
2. After briefly discussing the six opinion-oriented questions associated with Handout 15-1, provide each student with copies of the *Consumer Reports* article and the questions accompanying it (handouts 15-2 and 15-3).
3. Have students read the article from *Consumer Reports* and answer the questions either individually or in small groups. For some classes, Handout 15-2 can be given as a home study assignment with classroom discussion taking place on another day. NOTE: If your class has not previously examined government regulatory agencies you may want to review the functions of the Consumer Products Safety Comission before introducing Handout 15-2. Be sure to underscore that the commission has the power to set and enforce safety standards for various goods.

**Evaluation:**

1. Assess student contribution to class discussion.
2. Assess quality of student response to questions accompanying the *Consumer Reports* article.

**Teacher Answer Sheet to Handout 15-1**

1. Government regulation requires the hiring of people to perform the regulatory function. Since the added salaries and other expenses of staff members are paid out of tax revenues, the consumer's tax bill is likely to rise somewhat. Regulations also usually raise business costs. This results in higher prices for consumer goods and services.
2. Mr. Ford was probably not referring to the tax aspects of regulation. He was talking about how government regulation can be reflected in the retail prices of goods and services to the consumer.
3. Some examples are the pollution control devices installed in new automobiles, extensive federal safety standards for airlines, and new safety requirements for dangerous machines in factories. Students will find many other examples by reading newspapers and magazines.
4. Examples of benefits include longer life (pollution-free air), greater personal safety (minimum standards for tires), redress against fraud (repayment through court action), less risk (proper processing of canned foods), etc.
5. Individuals should be interested in getting the most for their money, but the cheapest product may not always be the best buy. Consumers should distinguish between short-term costs and long-range benefits. For example, the new safety requirements for factories may raise prices a bit, but the safety features may save much more in reduced hospital and medical bills for workers over the long run. Pollution control devices may raise the price of automobiles in the short run but may enable people to live longer and even to reduce medical expenses.
6. Different consumers put different values on the monetary worth of specific regulations. They may also differ about the long-term values of the costs that are passed through to retail prices today (e.g., how much would the students be willing to pay to save one life through pollution control?). The individual who gains the benefit from a particular regulation may not be the same individual who pays the costs, etc.

**Teacher Answer Sheet to Handout 15-3**

1. Should all consumers pay to make sure a product is reasonably safe? Or should those who are willing to take a chance, or who are unaware of the risks, be given the freedom to buy a cheaper but more hazardous product even though safer models are available?
2. Mowers presently being used seem to be causing quite a few accidents. As indicated in the article, the National Electronic Injury Surveillance System reported 161,000 mower-related injuries per year, including 60,000 that required some kind of hospital emergency-room treatment. The injuries included 3,500 amputations and 1,000 cases of loss of an eye in one year.
3. Safeguards against risk of injury from objects thrown by mowers, electrical shocks, gasoline fires, and burns caused by touching a hot surface. Other changes include those which would limit noise and prevent mowers that are ridden from cutting grass when operating in reverse. Another recommendation is the addition of a deadman control that would stop the blade automatically whenever the operator leaves the operating position.
4. Answer depends on experiences of class members.
5. Both Consumers Union and power mower industry leaders closely agree on the costs. There would be approximately a $40 or 32 percent increase in the average retail price of a walk-behind mower and a $100 or 11 percent increase in the average price of a riding mower.
6. It is very difficult to place a value on the pain, suffering, and inconvenience associated with such injuries. One source used for the estimate of pain and suffering is court awards involving law suits for injuries.
7. Consumers Union estimates that the new regulations would mean that consumers would pay 50 cents to $4.60 (cost) for each $1 reduction in the economic cost of injury (benefit). The Outdoor Power Equipment Institute estimates that the new regulations would mean that consumers would pay $2.60 (cost) for each $1 reduction in injury costs (benefit) not counting pain and suffering.
8. Paying a higher price for a machine in return for a reduced possibility of injury for the owner or any others who operate lawn mowers, but having less money to spend on other things. All buyers will get more safety but will no longer be able to choose a cheaper model that is less safe.
9. Freedom. These groups want the opportunity to select a lower-priced lawn mower without the additional safety measures and the freedom to add safety features as they choose. Free choice would not be available to them if all new mowers had to meet the government-mandated safety requirements.
10. Security. They want the additional security of the safer lawn mower, perhaps not only for themselves but for others who may be injured as innocent bystanders. They are willing to give up some of their freedom to choose.
11. Depends on each student's personal values.

# Handout 15-1

## CASE STUDY: WHAT DOES CONSUMER PROTECTION COST?

When Gerald R. Ford was president of the United States, he said that government regulation may cost the average family as much as $2,000 a year in higher prices. This figure is only based on a "guesstimate" of the extra costs to the consumer. It suggests that regulatory costs are greater than most Americans think.

(Based on a statement by William B. Mead, "Federal Regulation: The Price You Pay," *Money*, June 1975, p. 39.)

**Questions:**

1. How does government regulation cost the taxpayer money?

2. Do you think Gerald Ford was referring to tax dollars when he estimated $2,000 was the cost per family for regulation?

3. What are some examples of goods and services which may have increased in price because of government regulation?

4. What are some of the benefits that you think consumers obtain from consumer protection laws?

5. Why should consumers be concerned as to whether the extra costs of protection are actually worth paying? Is there a difference between the short-term and long-term effects?

6. Why will individual consumers make different judgments about the worth of particular government regulations?

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary)*, 1979. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

# Handout 15-2

## IS A SAFER LAWN MOWER WORTH THE PRICE?

How much is safety worth to the consumer? Should all consumers pay to make sure a product is reasonably safe? Or should those who are willing to take a chance, or who are unaware of the risks, be able to buy a cheaper but hazardous product when safer models are available? These are the kinds of questions being raised now that the U.S. Consumer Product Safety Commission (CPSC) has begun to develop safety standards for those products known to cause a large number of injuries. Such products include TV sets, book matches, swimming pool slides, and power lawn mowers, among others.

While the CPSC has the final word on the content of the standards, much of the preliminary drafting has been done for the commission by outside organizations. Consumers Union, under an agreement with the CPSC, has drafted a proposed safety standard for power lawn mowers. Predictably, the proposal has become a matter of controversy.

The basic criticism heard from the industry and from at least one Government agency is that the cost of a lawn mower built to conform to CU's proposed standard would increase costs more than the gains in safety warrant. Since the contention is one that will be heard time and again as the development of safety standards proceed, it's worth examining closely.

There are little hard data on the number, severity, and economic consequences of power-mower injuries. CU's estimate, drawn from the best available data, including statistics compiled by the National Electronic Injury Surveillance System, is that 161,000 mower-related injuries occur each year, including 60,000 that require some kind of hospital emergency-room treatment. The injuries result in 3,500 amputations; 1,000 cases a year result in the loss of an eye.

Approximately 68 per cent of the injuries occur when someone touches a moving mower blade; 20 percent result from objects thrown by the mowers; the remaining injuries relate to electric shock, burns from fire and hot surfaces, and problems with the steering, stability, brakes, and drivetrain of riding mowers. . . .

The proposed requirements cover a wide range of safety problems associated with lawn mowers. They would reduce the risk of injury from thrown objects. They would require safeguards against electrical shock, gasoline fires, and burns caused by touching a hot surface. They would limit noise. They would prevent riding mowers from cutting grass when operated in reverse, a cause of injuries to children not seen by the operator.

But by far the most important proposal is aimed at preventing contact with the moving blade—the most frequent cause of injury. That requirement calls for a "deadman" control—a control that stops the blade automatically whenever the operator leaves the operating position (to adjust the mower's cutting height, for example, or to clear glass from a clogged discharge chute). . . .

The power-mower industry, speaking through the Outdoor Power Equipment Institute, objects to a number of the proposals. It wants no limit on noise, since, it contends, noise is more a discomfort than a safety hazard. It advocates less stringent shock, fire, and burn requirements. It wants riding mowers to continue to cut in reverse. And it wants many of the requirements to be voluntary rather than mandatory. . . .

CU and the industry agree that the proposed standard would increase costs—and we even agree closely in our estimates of the size of the increase. In the first year, the standard would probably add

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approximately $40, or 32 percent, to the average retail price of a walk-behind power mower and about $100, or 11 percent to the average price of a riding mower. Estimated cost the first year would be between $270-million and $380-million, depending on how many power lawn mowers were produced.

Because benefits are so difficult to calculate, CU could give only the roughest economic guide to the costs and benefits of the standard. Our report said that, when all mowers conformed to the standard, it might cost anywhere from 50 cents to $4.50 for every $1 reduction in the economic cost of injury.

According to the industry estimate, the standard would eventually reduce injuries by 50 per cent, not 75 per cent. But even according to the industry's own estimates of injury costs, which exclude pain and suffering and other intangibles, the industry calculates CU's standard would cost $2.60 per dollar of injury when all mowers conform to the requirements of the standard.

A cost of more than $1 to reduce expenses of injury by $1 is not necessarily undesirable, CU's report pointed out. When injuries with an overwhelming potential for pain and suffering are involved, consumers may well be willing to pay the premium to minimize the risk, just as they buy insurance against other risks.

# Handout 15-3

## QUESTIONS ON HANDOUT 15-2, "IS A SAFER LAWN MOWER WORTH THE PRICE?"

1. What is a primary issue in this controversy as stated in the first paragraph?
2. Why do some people believe that present features of power mowers should be changed?
3. What are some of the recommended changes?
4. Would your family allow you to use a power lawn mower that does not have the recommended safety features?
5. If the changes recommended by Consumers Union are made, what is the estimated impact on the price of mowers?
6. Both Consumers Union and the power mower industry have completed cost-benefit studies. The cost includes the increased cost of the lawn mower due to the additional safety measures. The benefits are the saving of expenses associated with injuries that occur with lawn mowers that do not have the additional safety features. Why is the benefits side so difficult to measure?
7. What does Consumers Union estimate would be the benefit gained from each dollar spent on safety features for lawn mowers? What is the Outdoor Power Equipment Institute estimate?
8. If the standard recommended by Consumers Union is uniformly adopted for all new lawn mowers, what are the trade-offs to the consumer?
9. Freedom and security are two personal as well as social goals. Some lawn-mower buyers are against the adoption of mandatory safety measures for all lawn mowers. These consumers believe they can operate mowers safely without government-required safety features and they do not want to pay any more for mowers than they have to. They also think they should be able to buy only the safety features they think they need. Do these consumers place more priority on security or on freedom when they purchase power mowers? Why?
10. Other consumers believe the additional safety features should be required. Does this group seem to be more interested in security or freedom in its choice of power mowers? Why?
11. Do you believe the proposed safety regulations for power mowers should be adopted? Why or why not?

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# Lesson 16: Shaping the Budget of a Local Government

TIME REQUIRED: Two class periods, 45–50 minutes each

RECOMMENDED GRADE LEVEL: 9–12

MAJOR CONCEPTS: Economic wants
Scarcity and choice
Trade-offs among goals
Costs and benefits of government programs

RELATED CONCEPTS: Productive resources
Nature of economic systems
Taxes

**Instructional Objectives:** Students will

- Explain how to analyze the kinds of economic problems that face local governments;
- Use a systematic decision-making process to analyze a budget problem.

**Rationale for the Activity:** Governments—national, state, or local—must make the same types of economic choices that individuals do. Governments must determine what the desires and goals of the nation, state, or community are; what resources are available to satisfy these goals; and how to allocate the available resources in order to provide maximum satisfaction to citizens.

**Materials:** One copy of handouts 16-1 and 16-2 for each student.

**Procedure:**

1. Discuss the process of using systematic economic reasoning to reach decisions. Ask: If you were a city council member and had to make a decision on how to spend money, what steps would you take to ensure that your decision was a wise one? During the discussion point out that to reach the best decision it is necessary to:
   a. Define the problem—obtain the facts and identify what you must really decide;
   b. Specify the alternatives—determine what are the reasonable policy options;
   c. Establish criteria—identify standards for judging the alternatives;
   d. Evaluate each option in terms of each criterion—use cost-benefit analysis;
   e. Make a decision—choose which of the alternatives is best in accordance with the evaluations and the relative importance of criteria.
2. Divide the class into small groups (two or three students each). Distribute handouts 16-1 and 16-2 and instruct each group to use the five-step economic reasoning process to determine how the city's budget of $1.5 million should be allocated.
3. Before students begin their analysis, point out that each group may establish a different budget allocation. There is no "correct" allocation, since individual students may have different sets of priorities with respect to the goals and needs of the community. However, every student is expected to use the five-step decision-making process outlined on the worksheet.
4. While the groups are working (or in advance), teachers may give assistance by offering examples of the kinds of information that should be written on the worksheet, for example:
   a. What is the problem? The council does not have enough money for all the projects that have been suggested because the town only has $1.5 million to spend. Each council person would want to obtain facts about each cost estimate to be certain that the estimates are accurate.
   b. You may point out that there are many alternative ways to spend $1.5 million. Each student group should list at least two or three possible combinations. *Each combination of projects is one alternative.*
   c. Remind students that the criteria will vary. They should try to write down each criterion. In essence, students must ask themselves how they will judge which plan is the best. What do they think are important community goals: growth in local business? better fire protection? increased safety for senior citizens? reduction in juvenile crime? reduced unemployment? increased income for the poor? etc.
   d. When students evaluate the alternatives they will be making judgments about how well a particular spending plan meets each criterion. It will quickly become evident that more facts are needed to judge the degree of impact. For the purposes of this exercise, tell students that they can assume that as council members they can obtain information on such things as the estimated impact on taxes of changes in employment benefits.
   e. In making a decision students will find that "best" choice may not meet all the criteria established, but a choice must be made and as council members they will be asked to explain why they vote for a given combination of projects. NOTE: This is a forced choice problem. Council members do not have the option of cutting out all projects.
5. On the second day, after students have had ample time to complete their budget analysis worksheets, begin class discussion as follows:
   a. Have two or three groups give a brief oral

report on their decision-making process. Have them explain why they think their spending plan is best.

b. List all the recommendations on the chalkboard as alternatives for the entire class to consider.
c. On another part of the chalkboard, make a list of all the criteria that were used by any of the small groups. Try to consolidate those criteria that are essentially the same by adjusting wording. This will reduce the criteria to a manageable number.
d. Then ask each student to vote on the alternatives presented. After each vote eliminate the spending plans with the fewest votes and ask students to vote again on the remaining alternatives. Continue this process until one plan has obtained a majority vote.

**Evaluation:**

1. Assess quality of student participation in small-group work and in class participation.
2. Construct a similar list of items that could be bought by a family. Ask students to allocate the family budget using the decision-making worksheet as a guide.

# Handout 16-1

## CITY COUNCIL SIMULATION

You are a member of the City Council in a city of 100,000 people. Over the past ten years the city has had a population growth of about 20 percent. In order to provide the needed additional services, it has been necessary to increase the property tax rate for the past two years. Citizens are becoming angry about continuing increases.

The funds for the most urgent items in the budget for the forthcoming year have already been appropriated. There are approximately $1.5 million left to allocate and twelve important programs that various citizen groups have urged the council to approve:

**Proposal 1** One area of the city does not have adequate fire protection. A home in that area burned down in the past year, and a small child was badly hurt. Citizens in the area have written, phoned, and appeared at the budget hearings to request better fire protection. Cost for additional fire personnel: $200,000.

**Proposal 2** Problems with teenagers have been increasing. Vandalism is on the rise, parents are concerned about the mounting use of drugs, and the police are dealing with more runaways. The City Council would like to start a new juvenile division in the Police Department to help keep youngsters out of trouble. Cost for a social worker, two police officers, and a secretary: $100,000.

**Proposal 3** The city has inadequate recreational facilities, and much of what is available is in very bad condition. One group of citizens feels that more should be spent on recreation, especially for teenagers. More opportunity for recreational activities, they say, will pay off in a reduction in the number of teenagers getting into trouble. Cost for repairing the tennis, basketball, and softball areas, and additional personnel: $250,000.

**Proposal 4** In addition to the need for more recreational facilities there is the need for a neighborhood center in a particular area of the city. A wealthy citizen is willing to give the city a large mansion, which would provide a place for meetings, programs, and recreational opportunities for everyone from preschoolers to senior citizens—if the city can staff it. Cost of staffing and maintaining the neighborhood center: $350,000.

**Proposal 5** The city landfill site is reaching capacity. The city must find another area for trash disposal within the next year. Federal and state guidelines no longer allow municipalities to use low or marshy areas for landfill. Cost of using an out-of-town landfill site: $200,000.

**Proposal 6** One section of the city has developed very rapidly, and sewer lines are at capacity. Citizens are complaining about the unpleasant odors, and many think that a satellite treatment plant is needed. Federal funds will pay for building the plant but the community will have to pay for its operation. Cost of one year's operation of a treatment plant: $300,000.

**Proposal 7** Three streets in the city are unpaved and many contain large potholes. When it rains, the unpaved streets are muddy and all but impassable. In dry weather the dust is thick, and some citizens feel the dust to be a definite health hazard. Several citizens have broken automobile axles when hitting potholes. Cost of upgrading those streets: $500,000.

**Proposal 8** In one part of town the houses are rundown but could be rehabilitated. Wiring, plumbing, general carpentry work, roofing, etc., would make the houses more livable and improve the neighborhood's appearance. Some citizens have recommended that local money be given to poor citizens so that they could rehabilitate their homes. Cost to fix up the most rundown houses: $300,000.

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**Proposal 9** City employees are feeling the pinch of the rising cost of living. They are demanding a 10 percent raise. Estimated cost of employee pay raise for the first year: $200,000.

**Proposal 10** A lovely creek runs through the center of the city. Over the years it has been silting up, and as a result one residential section has a flooding problem. Homeowners there are demanding that the city dredge the creek to prevent flooding. Cost of dredging and fixing the banks: $150,000.

**Proposal 11** Citizens want educational standards to be upgraded. School officials say they can improve education in basic skills and career placement if they employ a specialist at each grade level. Cost of new personnel: $300,000.

**Proposal 12** The city has a high rate of teenage unemployment. Citizens have said there is a need to develop activities and meaningful work experiences for this age group. Much interest and support for a summer employment program exists. Cost for the summer employment program: $150,000.

ESTIMATED TOTAL COST OF ALL PROGRAMS . . . $3,000,000

You have been a good Council member—one who tries to study the issues and is concerned about the welfare of all the members of your community. *You would also like to be re-elected.* Which combination of programs totalling approximately $1,500,000 do you think is the best alternative for the community? Use the Budget Analysis Worksheet as a guide while making your decision.

# Handout 16-2

## BUDGET ANALYSIS WORKSHEET

Prepared by _____ Date _____
Name(s)

Step 1: Define the problem (Why does a choice have to be made?)

Step 2: Specify alternatives (What are some possible choices?)

Step 3: State the criteria (How will the alternatives be evaluated?)

Step 4: Evaluate the alternatives (How good is each alternative?)

Step 5: Make a decision (Which alternative is best and why?)

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# Lesson 17: Sharing the Costs of Risk

TIME REQUIRED: Two class periods of 45–50 minutes each with time between for collection of information from insurance agents

RECOMMENDED GRADE LEVEL: 9–12

MAJOR CONCEPTS: Scarcity and choice
Opportunity cost and trade-offs
Economic goals of freedom and security

RELATED CONCEPTS: Risk
Cost-benefit analysis

**Instructional Objectives:** Students will

- Describe the financial risks involved in owning property and how the amount of these risks can be cut (or minimized);
- Evaluate the costs of purchasing full protection against large risks;
- Describe how to choose an appropriate amount of protection.

**Rationale for the Activity:** The essence of insurance is sharing or spreading the costs of risk. We know that fire will burn some homes to the ground but we do not know which ones will catch fire. This uncertainty gives rise to a desire for insurance protection. Most students are well aware that insurance is a way to "buy" some security against the prospect of large losses due to unforeseen future events. This lesson will enable students to view insurance coverage as a complex consumer purchase which requires the same systematic decision-making process as any other major purchase. It also links consumers, owners of business, and government officials because all three groups must consider how much and what kind of insurance they need, and how much they can afford.

**Materials:** One copy of handouts 17-1 and 17-2 for each student.

**Procedure:**

1. Introduce the purpose of insurance (to share the costs of protecting against risk). Ask the students if they can give examples of the use of insurance by their families (health, life, damage to home from fire or natural disasters, personal liability, auto, servicing of TV, or any other types of insurance).
2. Distribute the case study (Handout 17-1) and have students read it.
3. Provide each student with a copy of the questions that accompany the homeowner's insurance case study (Handout 17-2). Divide the students into groups and assign each group to investigate the insurance available for the Sloan property described in the case study. Students should make an appointment with a local insurance agent and ask the agent to give them enough information to answer the questions. Try to have each student group approach a different insurance agent. This will enable the class to obtain some comparative data. If your town is very small, you may wish to have one or two agents visit your class, give a short talk, and answer questions.
4. Once the data are collected, review the information in class. Discussion can be focused by using the following questions:
   a. Did all agents recommend the same coverage? Why or why not?
   b. What kinds of homeowner risk were not insurable at any price?
   c. What options were available under the various coverages? For example, agencies may have recommended fire insurance for the full $40,000 or for various percentages of the value.
   d. How did the insurance agents deal with the problem of inflation? If the Sloans purchase insurance for the full present value of their house, will that coverage be sufficient 10 years later?
   e. How can the Sloans determine the right amount of homeowner's insurance for them to buy?
   f. If the Sloans lived in an apartment, would they need to consider various forms of homeowner's insurance? Explain your answer.
5. Conclude the lesson by helping students realize that homeowners are not the only people who incur risks and must find methods of sharing the costs of those risks. Businesses and public agencies must also engage in cost-benefit analysis when buying insurance. Questions such as the following should help focus discussion:
   a. The case study illustrated the need to insure a private home. Can the students think of other examples of needs for fire or natural disaster protection? (Examples: a factory, a retail store, a museum, a school.)
   b. Would an art museum be able to insure against fire for the full amount of all buildings and contents? (Probably not. The cost of insuring all the art contained within the building for its full value—if full value could be deter-

mined at all—might well be prohibitive. The museum would need to evaluate whether the cost of additional insurance would exceed possible benefits.)

c. Would a retail store or factory have to perform the same cost-benefit assessment? (Yes, because the value of the contents would fluctuate depending on the value of the raw materials and products in the building at a particular time.)

6. Have students write thank you messages to those persons who have given them assistance.
7. Optional Assignment: Tell students to assume that some homeowners in their neighborhood want to form an insurance cooperative. People proposing the cooperative idea believe it would greatly reduce the cost of insurance since no insurance company or agents would have to be paid. Have students examine this proposal using the following questions as a guide:
   a. How would the cooperative determine the amount of money each homeowner should contribute as his/her share?
   b. Should the members of the cooperative collect the contributions to this insurance fund at the beginning, or should they wait until somebody files for a payment and then collect each contribution?
   c. How would the cooperative handle administrative details, collect contributions, process payment requests, assess damages, investigate claims, and invest funds collected but not yet paid out?
   d. What kinds of risks would an insurance cooperative be unwilling to insure?
   e. Would an insurance cooperative eliminate the need for buyers to make choices concerning insurance coverage? Explain your answer.

**Evaluation:**

1. Assess quality of student data collected from insurance agent.
2. Assess quality of student participation in class discussion.

**Teacher Answer Sheet for Handout 17-2**

1. The list of insurable risks may include all the property losses which could occur because of fire, theft, wind storm, flood, civil disorder (riots), etc. It will also include liability for personal injury for property-related accidents, e.g., if a visitor fell on the Sloans' staircase and was injured, if the furnace blew up, or if a stranger slipped on the ice and broke a leg on the Sloans' sidewalk, etc.
2. Some companies will not write insurance coverage for floods, earthquakes, or street riots. Others will do so but only at very high premiums.
3. Have students get good estimates from an insurance agent. To get an estimate have the agent assume that the Sloans are real people living in your town or city and that they say they are willing to pay for all the insurance they "need," as defined by the agent.
4. Answers will depend on how individuals (the Sloans) value different degrees of security. Risking the loss of the antiques may not be as important to the Sloans as risking the loss of the house itself. They will judge which expenditure pattern for insurance gives them the most security for each dollar spent. The Sloans will trade off some protection to obtain lower insurance costs.
5. Answers will vary. The discussion should lead students to examine the implications of compulsory insurance for items like automobiles.

# Handout 17-1

## CASE STUDY: HOMEOWNER'S INSURANCE

The Sloans, a young couple with no children, recently purchased a 35-year-old brick-front house valued at $40,000. The house is situated on a small lot. It contains two bedrooms, one bath, a kitchen, a basement, a sitting room, an unheated porch, and an attached garage.

The house is located in an older neighborhood. Most houses in the neighborhood are in good repair, but a few show some signs of decline. Several years ago, a tornado-like wind ripped shingles off the roof. Within a few years the Sloans think the whole roof will need repair.

Neighbors tell the Sloans that the river flowing through town caused major flooding six years earlier. The Sloans' house had water in the basement during the flood, but it has been dry ever since. No one expects another rainstorm like the one that caused the flood, but the Sloans are a little worried.

The Sloans are not wealthy, but they do own some excellent antique furniture. The furniture, some of which is over 100 years old, has been passed down through the Sloan family from one generation to the next. A local furniture dealer estimated that the antiques are worth about $5,000. Their other furniture, their clothing, and various appliances are valued at about $10,000. Mrs. Sloan owns a diamond wedding ring worth $1,000 but has no other valuable jewelry.

Mr. and Mrs. Sloan have a combined income of $25,000 per year. They have no savings account because they used their savings for the down payment on the house. The mortgage on the house is $30,000.

Now that the Sloans have made this major investment, they want to purchase protection against some of the risks they face as homeowners. What kinds and amounts of insurance protection should the Sloans purchase?

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# Handout 17-2

## QUESTIONS ON THE HOMEOWNER'S INSURANCE CASE STUDY

1. As homeowners, what kinds of risks should the Sloans consider insuring against?

2. If the Sloans lived in your town or city could they get insurance coverage for all the kinds of homeowners risks described above? Why or why not?

3. If the Sloans had enough money to buy all the homeowners' insurance the insurance agent thinks they "need," how much would it cost each year?

4. If the Sloans told you they only had enough income to pay for half the coverage they "need," how would you advise them to cut costs?

5. Should the Sloans be allowed to have no homeowners' insurance coverage at all? Explain your answer.

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# Lesson 18: What Happens to Those Savings Dollars?

TIME REQUIRED: Two class periods of 45–50 minutes each, with time between for collection of information from financial institutions

RECOMMENDED LEVEL: Grades 9–12

MAJOR CONCEPTS: Opportunity cost
Saving
Investment
Capital goods
Interest rate

**Student Objectives:** Students will

- Calculate the opportunity cost of using credit;
- Compare the interest that can be earned on the alternative forms of saving offered by various financial institutions in the community;
- Compare the interest charged on the same type of loan or credit granted by various financial institutions in the community;
- Compare the interest charged on different types of loans and credits granted by various financial institutions in the community;
- Explain the relationship between saving in lending institutions and investment in capital goods.

**Rationale for the Activity:** Students tend to associate comparison shopping with day-to-day buying of such things as food and with high-cost items such as automobiles. They may not know that credit is offered at different prices or that alternative forms of saving can yield different rates of interest. This activity focuses on comprehending the rate-setting practices of banks. It also shows the relationship between the savings and the loans granted by various institutions. Special attention is given to business loans because these link the savings decisions of consumers with the investment decisions of business borrowers.

**Materials:** Multiple copies of Handout 18-1.

**Procedure:**

1. At the beginning of the lesson have each student or group of students select one institution in the community that provides savings accounts and makes loans: a commercial bank, a savings and loan association, a mutual savings bank, or a credit union. Telephone books may be used or the teacher can compile a master list of institutions which, on being asked, have expressed interest in participating. Tell students to use the accompanying interview form (Handout 18-1) to gather information from the source they select. Indicate that they will report their findings to the class (perhaps in 4–5 days).
2. Answer questions about the interview form or procedures. (NOTE: If there are only a few financial institutions in the community, small groups of students should gather the information. Or the teacher may set up in-school interviews with representatives of the financial institutions.)
3. Caution the students that some institutions may not provide all services indicated on the form. For example, savings and loan associations generally do not give personal loans. If the service is not provided, have students record that fact along with a note on the reason why.
4. Once the interviews have been conducted, have students present the information they have gathered to the class. Compare the plans offered by the various institutions. Then conduct a class discussion using the following questions as a guide:
   a. Why do interest rates paid on savings differ from one institution to another?
   b. Why might it be "sensible" for some people to save in an account with a relatively low rate of interest?
   c. Why do financial institutions have different interest rates for different forms of saving within their institutions?
   d. Why do financial institutions have more than one kind of loan?
   e. Why do financial institutions charge varying prices (rates of interest) for the same type of loans to different borrowers? On different kinds of loans?
   f. What do financial institutions do with the savings provided by depositors?
   g. Does it "pay" for a consumer, a government or the owner of a business to "shop around" for a place to save or a place to obtain a loan? Explain your answer.
   h. Why are savings deposited in financial institutions important to businesses in your community?
   i. What is the opportunity cost to the saver or borrower when the individual spends time shopping for the best rate of interest?
6. Advise students to write thank you notes to those persons who have given them assistance.

**Evaluation:**

1. Assess quality of survey data collected by students.
2. Assess quality of contributions to class discussion.

# Handout 18-1

## SURVEY OF ALTERNATE SAVINGS PLANS AND LOANS

Name of institution visited: _____ Type _____

Name of person interviewed: _____ Position _____

**SAVINGS**

1. Do you have passbook savings accounts? _____ Yes _____ No
2. If yes, what are the names of your savings account plans and what is the rate of interest for each? What is the method for figuring interest: simple or compound? If compounded, is it daily, quarterly, or semi-annually?

| Name of Plan and Basic Interest Rate | Method of Calculating Interest | Total Interest Rate |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

3. Can your depositors write checks on their savings accounts? _____ Yes _____ No
4. Is there a limit on the number of withdrawals from a savings account before a penalty has to be paid?

   _____ Yes _____ No
5. Do you have any other savings plan(s)? _____ Yes _____ No
6. If yes, name and describe the plan(s), rate of interest paid, and other important features or requirements.

| Name, Description, and Basic Interest Rate | Total Interest Rate | Additional Important Features |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

7. Do you offer certificates of deposit (C.D.'s)? _____ Yes _____ No
8. If yes, what are the various time periods (maturities) of the C.D.'s? What are the interest rates if interest is paid out periodically? If interest is left on deposit until maturity (i.e., compounded)? What are the penalties if the C.D.'s are cashed in early?

| Name, Description, and Basic Interest Rate | Total Interest Rate | Additional Important Features |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary)*, 1979. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

# SURVEY OF ALTERNATE SAVINGS PLANS AND LOANS (concluded)

**LOANS**

1. Do you provide loans to individuals and groups? _____ Yes _____ No
2. What are your current interest rates, typical length of loan, and required down payment (when applicable) for each of the following loan categories?

| | Interest Rate | Length of Loan | Required Down Payment |
|---|---|---|---|
| Consumer loans for items such as the following: cars, boats, recreational vehicles | | | |
| Mortgage loans to house buyers | | | |
| Personal loans | | | |
| Other types of nonbusiness loans | | | |

3. Do you make loans to businesses? _____ Yes _____ No
4. If yes, for what purposes, for what length of time, for which businesses, and any other pertinent information.

| Purpose | Typical Length | Kinds of Business of Borrowers | Other Information |
|---|---|---|---|
| Purchase equipment | | | |
| Finance inventories | | | |
| General working capital | | | |
| Construction | | | |
| Mortgages | | | |
| General line of credit | | | |
| Other | | | |

_____
Name of person completing this interview

_____
Date completed

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary)*, 1979. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

# GLOSSARY OF CONCEPTS

## Basic Economic Concepts

### The Basic Economic Problem

Economics is that branch of the social sciences which deals with how people use productive *resources* to satisfy their *wants*. The basic economic problem confronting individuals, groups of individuals, and entire societies is that resources are limited relative to their wants. This basic condition of *scarcity* requires them to make *choices* about how to utilize these resources most effectively in satisfying their wants. Were resources available in unlimited quantities, people would be able to produce and consume all they wanted. This would eliminate the need to make many difficult decisions about resource allocation. In the absence of such a world, people must make choices and, to make such choices, they must have a decision-making apparatus, which we call an economic system.

The basic economic problem of *scarcity* that has confronted all societies—ancient and modern, developed and underdeveloped, capitalist or communist—is

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*the central* problem from which all other economic problems flow. It is the starting point for an understanding of economics.

### 1. Economic Wants

Satisfying people's wants for goods and services is the main purpose of economic activity. This is what economics is all about. In modern societies people have a wide variety of wants. Some, such as food and shelter, are basic or subsistence wants. Others, such as snowmobiles and entertainment, provide the convenience and pleasant living most people desire. Still others concern the kinds of work people desire and the amount of leisure they seek. Some wants are individual in nature, whereas others, such as a family home, are collective. Most wants are private, but others are public, such as society's provision for highways, education, and national defense.

The process of satisfying wants is called *consumption* and the people whose wants are satisfied are called *consumers*. In addition to goods and services, consumers also want leisure time in which to enjoy consumption. In some cases they also derive certain satisfactions from the work that is necessary to produce goods and services. Thus, we can think of people's wants as having both consumption and production dimensions.

### 2. Productive Resources

Before goods and services can be consumed, they must be produced. For this to occur, *productive resources* (also called factors of production) are necessary. Productive resources constitute the input to production, while the goods and services produced constitute the output. There are several kinds of productive resources.

*Natural resources* are the gifts of nature used to produce goods and services. They include land, water, oil and mineral deposits, the fertility of the soil, climates suitable for growing crops, timber, and so on. Some of these resources are used up in the process of production, others renew themselves, while still others can be renewed through the conscious efforts of people.

*Human resources* are people and their physical and mental capacities. The number of people available for work and the hours they work constitute one dimension of labor input. Another is the quality of the labor skills provided and the motivation of those who provide them. The quality of the labor force reflects past efforts to improve skills and knowledge by means of education and training.

*Capital goods* are those things created by man's past efforts that are available to produce goods and services in the future. They include machines, tools, and factories. The kinds of capital goods used and how they are used reflect the state of technology which, in turn, is a reflection of scientific knowledge and the resources devoted to acquiring this knowledge.

Two dimensions of productive resources are often important. One is *time* which is required in the production as well as the consumption of goods; time cannot be recaptured, stored, or renewed. All people face the prospect of finite days and of finite lives, thereby forcing them to make decisions about how to allocate their time among various activities. *Space* is also important. The amount of living space available, the density of an area's population, and the distances that must be traveled to carry out economic activities influence economic behavior and are influenced by it.

### 3. Scarcity and Choice

The overriding characteristic of all productive resources is that these re-

sources are limited relative to human wants, and that adding to them requires the use of additional resources. Consequently, the goods and services that can be produced with these limited resources are themselves limited. These two conditions require that people must continuously make *choices* about how to use the scarce resources available to them. The fact that people's total economic wants exceed available resources creates the basic economic problem of *scarcity* which confronts *all* societies. Individuals confront scarcity deciding how to allocate their limited money incomes among alternate uses. Societies face scarcity in deciding how to allocate limited productive resources among alternate uses.

The basic economic problem for all societies is in deciding what goods and services shall be produced, which ones shall be foregone or postponed until later, and when and how productive resources will be transferred from one use to another. Decisions must also be made about how the total output of a society shall be divided among its members—that is, how real income will be distributed.

**4. Opportunity Cost and Trade-Offs**

*Opportunity cost* refers to what must be given up when decisions are made to use scarce productive resources to produce particular goods or services. A decision to produce one good means giving up the possibility of producing something else. Thus, the opportunity cost—what could have been produced with the resources instead—is the cost of producing that good. For an individual, the opportunity cost of something purchased is the other things which must be foregone. For a society, it is the alternate uses to which productive resources could have been put.

When a person or a group chooses one good instead of another, they are making a *trade-off*—that is, they are trading off less of one thing for more of something else. Society has to make trade-offs too, e.g., between its need for more energy and its desire to preserve the environment. Essentially this involves comparing the various costs and benefits of each of the alternatives. It also involves determining how these costs and benefits will affect different groups within the economic system.

**5. Marginalism and Equilibrium**

Rather than viewing choices as an all-or-nothing proposition, many decisions involve small changes—a little more of this or a little less of that. Consumers continuously practice *marginalism* as they consider the effect of purchasing one more or one less unit of a consumption good or service. Producers must decide whether to produce more or fewer units of output or to hire or fire additional workers. Decisions about small changes are made more often than decisions about big changes, and the former are usually easier to assess than the latter.

An examination of the effect of small or marginal changes leads us to the concept of *equilibrium*. Equilibrium is a state of "rest" in which there is no tendency for change. When some change does occur in an economy, this tends to set off a series of reactions whose effects eventually subside, and a new equilibrium occurs, i.e., there is no tendency for further change. If, for example, prices go up, consumers will react by reducing their purchases until they have fully adjusted to the new price—until the level of purchases displays no tendency toward further change. This we call equilibrium. In a rapidly changing world, other events often intervene before equilibrium is reached, setting off a new process of change toward a new equilibrium. The concept of equilibrium is useful, nonetheless, because it enables us to analyze the effects of marginal changes and the direction of change in economic activity, thereby throwing light on the trade-offs among alternative choices.

**6. Types of Economic Systems**

The way people and societies organize economic life to find answers to the questions posed above is called an *economic system*. An economic system can be described as the collection of institutions, laws, activities, controlling values, and human motivations that collectively govern economic decision-making.

We can identify four major types of economic systems. One is based on *tradition*—that is, people generally repeat the decisions made at an earlier time or by an earlier generation. A second is based on *command*—that is, the decisions are made largely by an authority, such as a feudal lord, a dictator, or a government agency, and then are passed down to the people who must accept them. The third is a system known as a market economy. This is a system of *decentralized* decision-making in which all persons participate by registering their desires in the market, in their varying capacities as consumers, producers, workers, savers, and investors. The market "adds up" these individual desires and creates out of them aggregate forces called demand and supply which in turn determine prices. Prices act as signals to producers, telling them what consumers want, and also act as regulators, allocating productive resources and finished goods and services among members of society.

We have chosen not to use "socialism," "communism" or "capitalism" to describe economic systems because these terms are often misunderstood, mean different things to different people, and are associated with value biases. No real world economy is a pure form of a tradition, command, or decentralized market system. Each economy uses somewhat different allocating mechanisms to answer the basic economic questions and each has somewhat different institutions, controlling values, and motivating forces at work which affect the operation of the economy.

Most societies are, in fact, examples of *mixed economies*—that is, their economic systems embrace more than one of the above-mentioned kinds of decision-making, though usually one dominates. The element of tradition is most evident in the rural areas of the less developed countries of Asia and Africa. The element of authoritarian command, where the individual has little or no input into decision-making, is most evident in the Soviet Union, the People's Republic of China, and other centrally planned economies. The element of decentralized or market decision-making is most evident in the United States, Canada and Western Europe. Among Western democracies, however, there exists a great deal of diversity in the degree of government planning and in types of economic institutions. Even in the United States there is a continuing and as yet unresolved debate concerning the role of government in economic planning.

To understand the nature of an economic system, four basic questions must be asked:

First, what is the nature of the "mix" of allocating mechanisms? How many economic decisions are left to the market? How many are made by authoritarian command? How many are made by a representative government subject to popular control? How many are tradition-oriented?

Second, what are the most important economic institutions of the society?

Third, what are the controlling values and motivating forces of the society? How well is its economic system performing in the light of its goals? And what kinds of policies are being followed to promote the achievement of the goals?

Fourth, what significant changes appear to be taking place in the economic system?

These four questions offer a systematic "way of thinking" about economic systems.

Finally, it should be noted that people of all societies, regardless of the type of economic system, engage in certain basic economic activities. These include *producing, exchanging,* and *consuming* goods and services, as well as *saving* and *investing* so that capital goods can be accumulated to increase future production. These activities take place within different institutional frameworks, depending on the kind of economic system. For example, the pattern of production in a command economy, such as that of the Soviet Union, will be decided by government planners but in a market economy it is decided by the demands emanating from individual choices. The distinguishing characteristics of an economic system are thus not the economic activities carried on but the kinds of economic institutions and the way in which decision-making is organized.

**7. Economic Incentives**

In mixed market economies perhaps the most important motivating force behind economic behavior is *individual self-interest.* Consumers allocate their limited incomes to increase their total satisfaction. Producers seek to maximize their profit and are pushed by the profit motive to combine productive resources in the most efficient ways to produce the goods and services consumers want to buy. Workers seek to sell their labor where the return in money and working conditions is highest, just as savers search out high interest rates in capital markets; both are motivated by self-interest. Similarly, losses (negative profits) are a signal to move resources elsewhere.

*Profits* are a particularly important incentive in a market economy. Profit is what remains after the costs of production have been deducted from the revenue derived from the sale of goods. It is the desire for profit that persuades entrepreneurs to establish new businesses and later to change the pattern of production (e.g., from big cars to small cars). It is the profit motive which stimulates managers to make businesses more efficient, to introduce new cost-cutting technologies in production, and to compete more vigorously with other businesses for the consumers' dollars. Realized profits provide an important source of funds for new investment and thereby stimulate future growth. Thus, in a competitive market economy, profit spurs both efficiency and growth.

Not all economic decisions in the U.S. economy are left to individuals. People form themselves into groups and use group pressure, both in the market and through political processes, to achieve their goals. For example, workers form labor unions and engage in collective rather than individual bargaining over wages, and companies use trade associations to lobby in Congress for favorable tax laws. The major motivations here are to serve the interest of individual workers and the owners of individual businesses. Government also plays a major role in the U.S. economy and seeks through its activities to enhance the general welfare of the people. This includes establishing conditions to foster the opportunities for individuals, businesses, and groups to achieve their own interests.

In other economic systems, different motivating forces have been evident. In command countries, for example, much emphasis is placed by people in authority on the contribution individuals and groups can make to the welfare of the state rather than to their own personal interests. In some earlier societies, a major motivation was glorifying the ruler (e.g., building pyramids in Pharoah's Egypt), God (e.g., building cathedrals in medieval Europe), or the state (e.g., Hitler's Germany). Whatever the motivations may be, they will influence the form of the

economic system and the way it functions.

**8. Specialization, Comparative Advantage and the Division of Labor**

Modern economic systems are based on *specialization* because it permits scarce resources to be used more efficiently. Specialization occurs when an economic unit produces a narrower range of goods and services than it consumes. Specialization can be practiced by an individual, by a business, by a region, or by a co[illegible] Regions of countries, for example, normally specialize in the production of those [illegible]n and services which they are best fitted to produce, given their particular endowment of productive resources, and they buy the rest of what they need from other regions. Specialization is the basis of both domestic and international trade.

The principle of *comparative advantage* determines which particular goods and services can be produced most efficiently and by which countries. It states that the greatest gain in total output will occur if each country specializes in producing those goods and services which can be produced with the greatest relative efficiency. In fact, however, a complex system of tax incentives, tariffs, quotas and other regulations influences patterns of international trade and investment.

The concept of *division of labor* is closely related to comparative advantage. Productive tasks are divided among workers so as to take advantage of the gains from worker specialization. Because of the division of labor, individuals must purchase many of the goods and services they need from others. This has led to the development of an *exchange economy* and the use of money to facilitate exchange.

**9. Voluntary Exchange**

When two individuals decide to exchange something (e.g., A buys a radio from B), we know that both A and B are better off in their own minds, for otherwise they would not have traded. Voluntary exchange is an important feature of the American and other market-oriented economies. Individuals, groups and regions specialize in the production of particular goods and in the performance of particular services, producing more of them than they themselves wish to consume. They then exchange the surplus for goods and services produced by others, and all are better off as a result. Since barter is clumsy, *money* has been developed to facilitate exchange. When buyers and sellers come together to engage in exchange, we say a market exists. Markets and prices, as explained below, constitute the principal allocating mechanism of the American economy, determining what goods and services will be produced, how they will be produced, and who will get them. Underlying this mechanism is the concept of voluntary exchange.

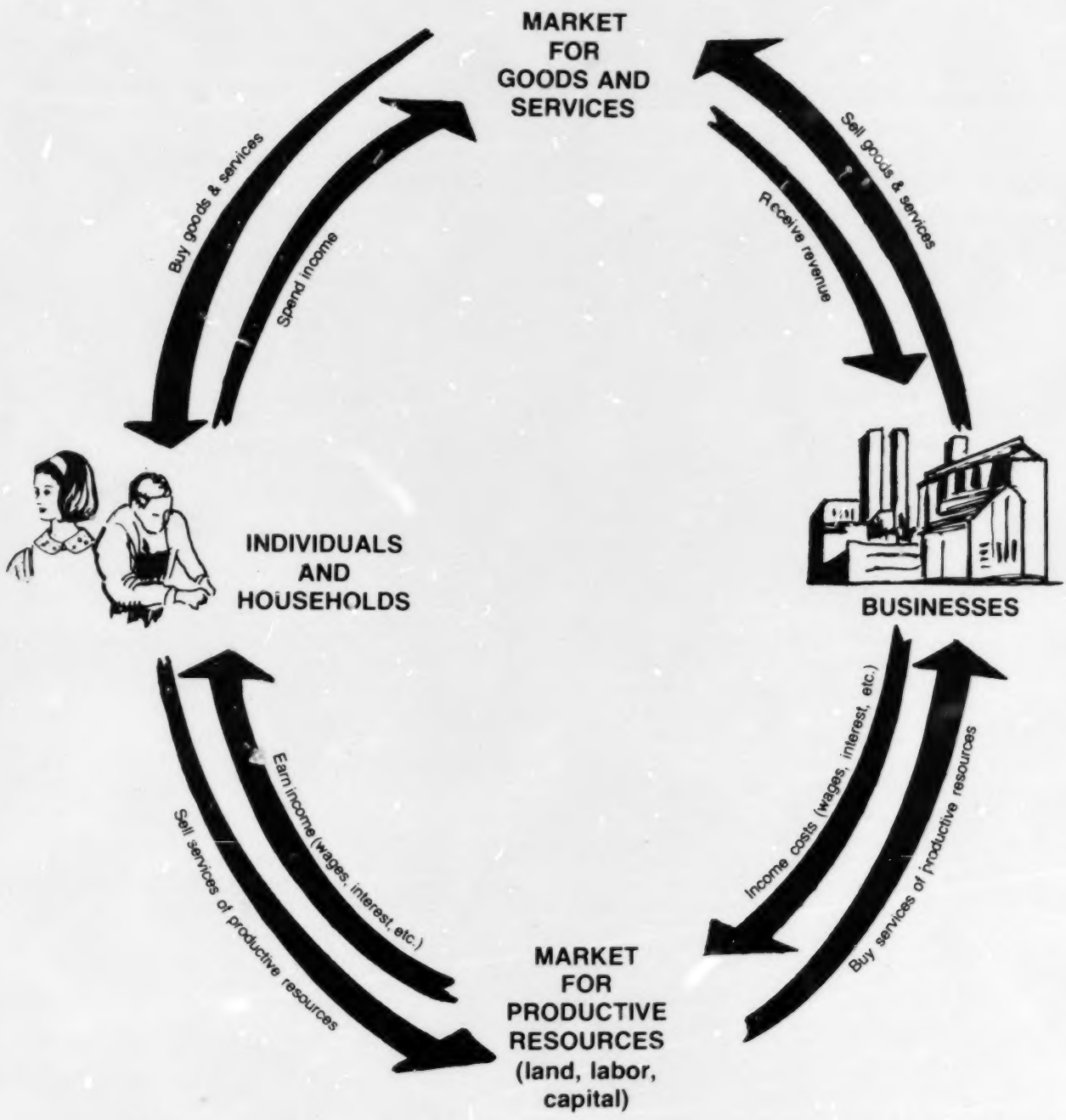
**10. Interdependence**

When an economy is based on specialization and exchange, as most modern economies are, the people of the economy become *interdependent*. The American economy is characterized by a high degree of interdependence—among individuals, businesses, and regions. One way of demonstrating both interdependence and the overall structure of the economy is through a diagram (see Figure 4) showing the circular flow of finished goods and services, productive services, and money payments.

In the private sector households provide their labor, savings, and property to businesses which use them to produce consumer goods and services; these are then sold to households. This circular flow of productive resources and finished goods and services is paralleled by a reverse flow of money. Producers pay wages, interest, and other forms of income to households who then spend the money buying goods and services from producers.

*Figure 4*

# THE CIRCULAR FLOW OF ECONOMIC ACTIVITY


MARKET FOR GOODS AND SERVICES
Buy goods & services
Spend income
Sell goods & services
Receive revenue
INDIVIDUALS AND HOUSEHOLDS
BUSINESSES
Earn income (wages, interest, etc.)
Sell services of productive resources
Income costs (wages, interest, etc.)
Buy services of productive resources
MARKET FOR PRODUCTIVE RESOURCES (land, labor, capital)

The presence of the government sector (not shown in Figure 4) results in additional flows of productive services from households and businesses to governments, and of goods and services from governments to households and businesses. The counterflow of money is one of wages, interest, and other forms of income moving from governments to households and businesses, and of money payments, including taxes, moving from households and businesses to governments.

**11. Government Intervention and Regulation**

In the American economy the questions of what to produce, how to produce it, and how to share it are not left exclusively to free market forces. In our mixed economy, *government* plays a key role. Government influences the allocation of resources in several ways. Control over the *production* of some goods and services (such as national defense, highways and justice) has been removed from the private sector and placed in the public sector where government makes the important decisions. Government also intervenes in many markets with *regulations and controls* with the intent to improve upon the results produced by the free play of market forces. Examples are public utility regulation, tariffs, minimum wage laws, and antipollution and safety requirements. Finally, through its *taxing and spending* activities, government shifts control over resources from private hands to the public, and it also *redistributes* income among individuals through transfer payments. These activities influence what and how much will be produced, how it will be produced, and how it will be shared or used.

## Microeconomics: Resource Allocation and Income Distribution

*Microeconomics* is the study of the behavior of individual households, firms and markets, of how prices and outputs are determined in those markets, and of how the price mechanism allocates resources and distributes income. To understand what goods and services an economy will produce requires that we know how the prices of goods and services are determined, how these prices determine the pattern of production, and how this pattern is influenced both by the structure of markets and by government actions.

**12. Markets, Supply and Demand**

As already stated, the *market* is a mechanism whereby individual buyers and sellers register their decisions to buy or sell goods and services and productive resources. The market "adds up" these individual decisions and creates out of them aggregate forces known as supply and demand. As a general rule, supply and demand thus constitute the sum total of all the individual decisions to sell and to buy in the market. Interacting with one another, they determine the price of what is bought and sold.

*Supply* indicates the amounts of anything that will be offered for sale at various possible prices during some period of time. Generally, the higher the price of something, the more of it will be produced and offered for sale—and vice-versa. *Demand* reflects the amounts that consumers will be willing and able to buy at various possible prices during the same time period. As a general rule, the lower the price, the more will be demanded—and vice-versa. The *market* price of something is the price that prevails in the market at a particular time. In competitive markets, it reflects the conditions of supply and demand; in other markets, it may reflect monopoly influences or governmental regulation.

**13. The Price Mechanism**

Market prices constitute the principal allocating mechanism of the American

economy. Prices act as "signals," flashing information to households, producers, workers, savers, and investors, helping them to decide what are the most rational and profitable decisions to make in the market. The array of prices confronting individuals and households, for example, helps to determine the way they will spend their limited incomes. Wages and salaries (the price of labor) determine the incomes of workers and also allocate labor among different uses. Interest rates (the price of debt capital) determine what kinds of investments will attract money capital. The prices of finished goods relative to costs indicate to producers the most profitable items to produce while the prices of productive resources determine their costs of production. Changes in prices affect the way consumers spend their money, where workers work, how savings are invested, and what producers produce.

Prices also are a rationing device for allocating goods and services among consumers and productive resources among producers. If, for example, a freeze destroys half the Florida orange crop, the reduced supply will lead to higher prices which ration out those who are unwilling or unable to pay the higher price. If a new technological development makes it possible to produce minicalculators more cheaply, the lower prices will enable more consumers to buy them. Buyers bid against one another for scarce resources; sellers compete with one another for customers. The resulting prices reflect the relative scarcity or abundance of goods and determine who gets them and who goes without.

**14. Competition and Market Structure**

Some knowledge of market structure is essential to understanding how a market economy functions and how prices, costs, and output levels are determined. The term *market structure* refers to the degree of competition prevailing in a particular market and the extent to which the government under various laws intervenes in the market to influence the pricing process and the rate of profit. Some markets are highly competitive in that there are many sellers, none of whom can affect the market price, and entry into and exit from the industry are relatively easy. Other markets are dominated by a small number of sellers whose individual actions can affect and sometimes control prices, where entry is difficult, and where as a consequence substantial market power may rest with a few producers. The continuum of market structures runs from highly competitive to monopolistic. There are many cases between these two extremes. Foreign "cartels" (such as OPEC) represent still another device for altering the effects of competition. The purpose of antitrust laws has been to try to maintain competition so the market economy will function more effectively and serve consumers better.

No effort should be made to introduce precollege students to the various cost curves used by economists to illustrate various detailed market situations. Such students should, however, develop an intuitive understanding of these different kinds of markets and, when confronted by a particular situation, should instinctively think in terms of such things as the number of sellers, the degree of product differentiation, possible barriers to the entry of new firms, possible collusive action among sellers, the role of the government in the market, and the level of profits earned. The important thing for students to realize is that prices, which determine what and how much will be produced, are themselves affected by the competitive structure of various markets.

**15. "Market Failures": Lack of Information, Resource Immobility, Externalities**

Other factors in addition to supply and demand, market structure, and government intervention to prevent monopoly affect the functioning of the market mechanism.

*Lack of knowledge* of market conditions on the part of consumers, workers, and managers of small businesses affects the decisions they must make and the efficiency with which the market mechanism affects the allocation of resources. Consumers, for example, are not always well-informed about the quality of the products on sale or of the alternatives they have. Unemployed workers may not know of job opportunities in nearby labor markets. Managers of small businesses may be unfamiliar with the nature and the amount of the demand for their product or with the extent of the competition. The high costs of obtaining accurate information needed for the market mechanism to operate more efficiently have often given rise to public provision of information.

*Resource immobility* can also result in a less-than-perfect functioning of the market mechanism. Workers, for example, may not be able to move from declining to expanding industries because they lack the specialized skills needed or do not have the money needed to relocate themselves. Various public policies have been developed to deal with these problems. They include consumer education and consumer legislation, manpower training programs, and special information and credit facilities for small business executives. To the extent that these policies succeed, the market mechanism will operate more efficiently. Government intervention, however, does not always work effectively; and sometimes it can militate rather than mitigate market imperfections.

*Externalities* are side-effects that result when the production or consumption of a good or service in the market directly affects the welfare of others, without being reflected through the price mechanism. Externalities occur in both production and consumption, and they can have positive or negative effects. For example, cigarette smoking is increasingly viewed as having detrimental effects on nonsmokers in close proximity to smokers; on the other hand, more schooling is regarded as improving the well-being not only of the individuals receiving the schooling but also of others through the creation of a better-educated society. Polluting firms along rivers reduce the pleasure derived by people who might swim or fish in the river.

Externalities can be treated in various ways. Positive externalities (resulting from education, for example) can be stimulated by subsidizing those activities which produce them. Negative externalities (resulting from pollution, for example) can be corrected directly by those who produce the externalities, or indirectly by taxing those who produce the externalities, by giving subsidies to help to eliminate the externalities, by compensating those people adversely affected by them, or by direct legal prohibition. If no correction occurs, as often happens, the result is that social welfare is less than it would otherwise be. At the same time, government efforts to correct for externalities are not always successful.

**16. Income Distribution and Government Redistribution**

The size of a person's money income largely determines his or her share of the total of goods and services produced. Students should have some knowledge of the sources of personal income and how income is distributed in the U.S. Students should also learn how nongovernmental forces (e.g., unions, inflation, business conditions, and unemployment) and governmental policies (e.g., tax and transfer policies) influence this distribution.

*Sources of Income.* The functional distribution of income focuses on the main sources of personal income: wages and salaries, rent, interest, dividends, the earnings of unincorporated enterprises, and transfer payments. Except for the last source, these are the rewards people receive for contributing their labor, savings, and intellectual and entrepreneurial skill to the productive process. Transfer payments, which have grown rapidly in recent years, are government payments

that require little or no current productive activity in return, although in some cases productive activity may have been performed in the past. The most important transfer payments are social security benefits, welfare payments, food stamps, unemployment compensation, veterans benefits, and old age assistance.

*Income Distribution.* The size distribution of income shows the number of families arrayed by different levels of income. The basic force determining the distribution of income is the market which establishes the value of a person's services and compensates him or her accordingly. Other forces are also important. Inherited wealth, the ownership of property, custom and tradition, and the influence of strong organizations such as labor unions, employer associations, and government intervention also play a role in determining the pattern of personal income distribution.

*Government Modifications.* Government policy, as provided by law, has a major effect on the distribution of income. Taxes take money away from people; government spending and transfers put it in their hands. A progressive income tax takes a larger percentage of income from those with higher incomes. Government spending for the most part is not designed to redistribute income. Transfer payments on the other hand are more frequently redistributive in their effect by being directed to those with low incomes. Not all transfer payments, however, go to people with low incomes.

*Nongovernmental Modifications.* It is important to understand the role of organized groups such as businesses, unions, and farmers in seeking to alter the distribution of income. An increase in the total income of the nation permits everyone to have a larger *amount* (though not to an unlimited extent). But various business, labor, farm, and other groups, including such groups as the poor, the veterans, and the elderly, seek continuously to expand their *share* of total income. If these groups together try to obtain too much—the total claims on resources exceed what is available—either inflation or unemployment will result, or others will receive less. Finally, other practices and customs, such as discrimination and tradition, also help to shape the distribution of income. The distribution of income and the extent of redistribution are controversial policy areas, with many decisions made through the political process.

## Macroeconomics: Economic Stability and Growth

*Macroeconomics* is the study of the functioning of the economy as a whole—of the total output of the economy, the total level of employment, and movements in the average level of all prices. The essence of macroeconomics lies in analyzing the determinants of aggregate supply (the total productive capacity of an economic system) and of aggregate demand (the total spending by economic units on the goods and services produced). In the short run, the main problem of macroeconomics is why aggregate demand sometimes exceeds and sometimes falls short of aggregate supply, thus bringing on inflation and/or recession. In the long run, macroeconomics is concerned primarily with economic growth—increases in the productive capacity of the economy and average real income per person.

### 17. Aggregate Supply and Productive Capacity

*Aggregate supply* is the total amount of goods and services an economy can produce when all of its resources are fully and efficiently employed. This full-employment productive capacity of the economy is substantially fixed at any moment of time, but it can grow over time with increases in the labor force, improved education and training of workers, more saving and capital investment, discovery of new resources, and technological advances.

**18. Aggregate Demand: Unemployment and Inflation**

*Aggregate demand* is the sum of spending on goods and services in any time period by individuals, households, businesses, and governments. When aggregate demand falls seriously short of what the economy is capable of producing at full employment, and wage rates are relatively inflexible, *unemployment* and recession or depression will result. When aggregate demand is greater than aggregate supply at full employment, *inflation* results. Keeping aggregate demand roughly equal to full-employment aggregate supply is one key to maintaining a full-employment economy without serious inflation or unemployment. Thus, in analyzing aggregate demand, it is important to study the basic forces controlling spending by households, business, and governments.

Some unemployment occurs for reasons in addition to inadequate aggregate demand. Some people lack the skills or education to fill jobs even when aggregate demand is high. Other people reside in depressed areas where job opportunities are limited. And some people are the victims of discrimination in employment. This means that a variety of policies is needed to deal with unemployment.

Inflationary pressures can also be generated by the actions of businesses and unions in key industries where they push up wages and prices; this is known as "cost-push inflation." Supply shortages, often of a temporary nature, can push up prices, sometimes enough to affect the overall price level. Again, aggregate demand policies are not always the most appropriate way to restrain inflationary forces.

**19. Price Level Changes**

The *gross national product*, GNP—the total value of all goods and services produced—and national income accounts measure the total output of an economic system. In using these data, it is important to distinguish between changes in *real* output and changes that merely reflect price increases or decreases; the former we call "real income" or "real GNP," and the latter nominal income or nominal GNP. When inflation occurs, money income rises faster than real income, as the price level (the average of the prices of all goods and services) rises. This forces individuals and businesses to make adjustments both to higher prices and to changes in relative prices of different goods and services. Unemployment brings even greater social losses, in human and nonhuman productive capacity wasted and in the social and economic costs of unemployment to the individuals concerned. When society must face a trade-off between the two, difficult problems of measurement, comparison, and choice are involved.

**20. Money and Monetary Policy**

The government has two major ways—*monetary policy* and *fiscal policy*—of trying to keep the level of aggregate demand roughly in balance with the growing productive capacity of the nation. Monetary policy seeks to affect the amount of money in existence and its cost (interest rates). This is the responsibility of the Federal Reserve System, a quasi-independent government agency.

Money is generally defined as the sum of currency (cash) and demand deposits (checking accounts) in banks. Currency is printed or coined by the government but the bulk of the nation's money supply, demand deposits, is created by the banking system. The banking system increases the money supply by making loans to individuals, businesses, and the government. This lending creates more demand deposits and thus increases the spending power of the economic units which make up aggregate demand.

Banks are required to hold reserves behind their deposits. The principal but not the only instrument of Federal Reserve monetary policy is control over these

reserves which are held on deposit at Federal Reserve Banks. If the Federal Reserve provides the banks with more reserves, this permits them to lend more to the public, thus making possible an increase in aggregate demand. Conversely, a "tight money" policy, which involves holding down the size of bank reserves, means restraining aggregate demand.

Monetary policy today is an area of considerable controversy with economists divided on what Federal Reserve policy ought to be. We still have much to learn about how to manage the money supply so as to achieve economic stability.

**21. Fiscal Policy: Taxes, Expenditures, and Transfers**

*Fiscal policy* consists of changes in taxes, government expenditures on goods and services, and transfer payments to control the level of aggregate demand. Generally, when the government increases spending on goods and services or on transfer payments but does not correspondingly increase tax receipts, total aggregate demand will be stimulated and push the economy toward more employment or inflation. Conversely, when government reduces expenditures without reducing tax receipts, aggregate demand will be reduced and push the economy toward less employment or less inflation. Similar effects can be obtained by cutting or increasing tax receipts, with government expenditures being held constant.

Students should have a rough idea of the magnitude of government expenditures and taxes, and should know something about the practical problems of increasing or decreasing taxes and expenditures flexibly. They should see the difference between government purchases of goods and services, which provide jobs directly, and transfer payments (unemployment insurance, social security payments, and the like), which change recipients' incomes but do not directly provide jobs or use up productive resources. As with monetary policy, we still have much to learn about fiscal policy and how to use it to achieve stable economic growth. It is important to understand both its potentialities and its limitations.

**22. Economic Growth**

*Economic growth* is generally defined as the increase over an extended period of the total production of the economy and output per person. If a growing population is to be able to consume more goods and services, more must be produced. Economic growth also creates jobs for our growing labor force. Finally, there are many claims on our economy's output—for more consumer goods and capital goods provided through the private sector as well as more national defense, mass transit, and other social programs provided through the public sector. If the economy does not grow, then one person or group can have more only if another person or group receives less. Such a situation generates both inflationary pressures and social tensions.

In recent years, the national desire for growth has been qualified by a concern over some of its adverse side-effects—air and water pollution, urban congestion, destruction of the natural beauties of the environment by strip-mining, urban sprawl, etc. Hence, the quality of growth is also important. This issue can be understood by using the tools of economic analysis already developed. For example, air and water pollution are examples of negative externalities; we face opportunity costs and trade-offs as we seek to expand our energy supplies and also protect the environment. Preserving the quality of life will require acceptance of a slightly slower rate of growth as some productive resources are diverted into social and environmental projects that will offset some of the negative effects of economic growth.

**23. Saving, Investment, and Productivity**

Economic analysis gives us a framework for understanding the growth proc-

ess: why some countries grow faster than others, and why growth rates vary over the years.

Increasing the supply of inputs—natural resources, labor, and capital—leads to an increase in output. Over the years some of the nation's economic growth has resulted from increases in the size of the labor force and the stock of capital. Another main source of growth is increased productivity, meaning that resources are used more efficiently so that there is increased output per unit of input.

Saving and investing is the heart of the growth process since an increased stock of capital contributes to both increased production and increased productivity. *Saving* occurs when individuals, businesses, and the economy as a whole do not consume all of current income or output. *Investment* occurs when these savings are used to increase the economy's productive capacity by developing new technology and by building new factories, machines and the like. Or savings may be invested in human beings through education and training or in research and development. From an individual standpoint savings represent income not spent but placed in financial institutions, such as banks, savings and loan associations, and pension funds, which transfer them to those who wish to buy capital goods. In a real sense, saving and investing represents a diversion of productive resources from consumption into the creation of capital goods which make growth possible.

Government actions and policies may have both positive and negative effects on *productivity*. Historically government has encouraged growth and productivity increases by its investments in transportation, education, and agricultural research. Government has also provided a framework of law and political stability. On the other hand, growth and productivity increases are sometimes hampered by government actions, such as rules which serve particular groups rather than the general welfare, tax policies which adversely affect saving and investment, and regulated prices which prevent resources from moving into other more productive uses.

## The World Economy

### 24. International Economics

Finally, economists are concerned with economic relations among nation-states, including *international trade* and investment and international monetary relationships.

In general, economists use the same tools of analysis to understand the world economy as they do to understand a national economy. The principles underlying international trade are the same as those underlying domestic trade. Goods and services are sold in international markets at prices determined by demand and supply. However, special problems arise in international analysis because of the existence of national boundaries and different monetary systems. Moreover, the free functioning of market forces is modified in many international markets by government intervention in the form of *tariffs*, quotas, subsidies, state trading, and cartel action (e.g., oil).

The principle of comparative advantage explains why countries specialize in producing particular goods and services. *Exchange rates* indicate the relative prices of different currencies and indirectly the relative prices at which these goods and services are traded. Exchange rates are determined by the forces of supply and demand in foreign exchange markets with varying degrees of government intervention influencing the actual rate.

Economic growth is a universal concern but is particularly important to the developing nations which need to increase productivity to raise living standards. International investment and technology transfers are two important processes for

promoting the growth of nations. These may be transmitted from one country to another either through private channels (private business investments, including those of multinational corporations) or through public channels (foreign aid, loans by international organizations). Inflation and recession are also international phenomena, being transmitted from one country to another by changes in incomes, prices, international trade, and capital movements.

## ECONOMIC INSTITUTIONS

The institutions of an economy are of several kinds. There are formal organizations, such as households, corporations, government agencies, banks, labor unions, and cooperatives. There are also the customary ways of doing things, such as the use of money and of collective bargaining. And there are common prevailing sets of beliefs which pervade an economic system. The nature of economic institutions varies depending on the kind of economic system, although some institutions are common to almost all systems.

In the United States the household is the typical unit of consumption, the private firm (which can take various legal forms, such as the corporation or the partnership) is the typical unit of production, workers organize into labor unions to further their interests, government agencies play an important regulatory role in our economy, and some state-owned enterprises (such as the Tennessee Valley Authority, the Post Office, and municipal bus lines) produce goods and services. Students should know that other economic systems use different institutions. For example, China carries on agricultural production through communes and the Soviet Union through collective farms. Israel has its kibbutzim where people work voluntarily on collective farms. In Sweden and Finland cooperatives are important. Banks flourish in almost every country.

We also have institutions which reflect customary ways of doing things. Students should know that almost all societies—except for some primitive tribes—use money as a medium of exchange and a measure of value. All societies have some system of property ownership. In some, such as the United States, private ownership of property is emphasized. In others, such as China, public ownership is the rule (although this does not necessarily mean that there is public input into decision-making). Government planning is highly centralized and comprehensive in the Soviet Union, more decentralized in Yugoslavia, and nondirective ("indicative") in France. Some institutions are limited to certain types of economic systems, such as collective bargaining in democratic industrial countries.

Cultural traditions of societies also influence the pattern of economic behavior. Examples are the highly visible "work ethic" of the Japanese, the nonmaterialistic philosophy of certain Buddhist countries, and the monthly pattern of retail sales in the United States with buying peaks in the spring and just before Christmas.

The performance of these economic units varies across time and place, in part because economic institutions reflect the interplay of individuals pursuing somewhat different goals and objectives. Moreover, these goals and objectives are constantly evolving in response to the way these institutions affect economic performance. Some economic units or groups possess greater power than others and, consequently have greater potential for affecting the institutional framework within which economic activity occurs. Because economic institutions play such a central role in every economic system, an understanding of them is essential to interpreting how market forces operate to allocate scarce resources among competing wants.

# MEASUREMENT CONCEPTS

A number of measurement concepts can help in explaining economic developments and assessing economic performance. These concepts are not unique to economics nor are they limited in their use to the social sciences. Many of these concepts might be incorporated into the mathematics curriculum but taught with an emphasis on their applicability and usefulness in understanding economics.

**1. Averages and Distributions Around the Average**

Students should be able to distinguish, for example, between the total Gross National Product and per capita or average GNP. They should also understand that an average tells nothing about the distribution of values around the average. Per capita income, for example, provides no information about how income is distributed. Instead, an array of the number or percentage of income recipients by levels of income is required to show how income is distributed.

**2. Amounts versus Rates**

Students should be able to distinguish between, for example, the amount of unemployment (the number of unemployed workers) and the simple percentage unemployment rate (unemployment expressed as a percentage of the labor force), or between the amount of Gross National Product and its rate of growth (percent per year increase in GNP).

**3. Index Numbers**

Index numbers are useful statistical devices for measuring average changes in such things as consumer prices and industrial production. Students should know that, for example, the Consumer Price Index measures the average change from some earlier base year in the prices paid by urban blue-collar and clerical workers for the collection of goods and services they usually purchase.

**4. Real versus Nominal**

Students should be able to distinguish between nominal or money GNP which is measured at current prices, and real GNP which is money GNP adjusted to take account of price changes. If prices increase, for example, the amount of real GNP, as measured in last year's prices, will be less than nominal or money GNP.

**5. Ratios**

Ratios express the relationship of one numerical value to another. An example would be the roughly 2:1 ratio of unemployed black youths to unemployed white youths.

**6. Tables**

Tables are used to display numbers in a concise fashion and to reveal particular relationships among quantitative data. A tax table, for example, shows the amounts of tax to be paid for each different income level.

**7. Graphs and Charts**

Graphs are used to plot the relationships among different data. One example would be demand and supply curves which plot the relationship between price and the amounts of a good offered for sale and demanded in the market. Other examples would be bar charts comparing, say, the percentage unemployment rates of different subgroups of the population, or "pie" charts showing, for example, the way tax revenues are spent.

# Bibliography of Other Sources

## SUGGESTED SUPPLEMENTARY MATERIALS AND SOURCES OF INFORMATION

Vast amounts of teacher and pupil materials are available on basic business and consumer education topics. What follows is a brief selection from a variety of sources. These are not intended as a definitive listing of appropriate materials but rather as a guide to lead interested economic educators to useful commercial and noncommercial products.

### Major National Organizations

The following organizations publish journals, newsletters, and monographs on economic affairs, many of which relate to basic business and consumer education topics. We advise you to write to obtain catalogs and ordering information.

AFL-CIO
Education Department
815-16th Street, NW
Washington, DC 20006

American Council on Consumer Interests
162 Stanley Hall
University of Missouri
Columbia, MO 65211

American Home Economics Association
2010 Massachusetts Avenue, NW
Washington, DC 20036

American Stock Exchange
86 Trinity Place
New York, NY 10006

Chamber of Commerce of the United States
1615 H Street, NW
Washington, DC 20006

Changing Times Education Service
1729 H Street, NW
Washington, DC 20006

Consumer Education Division
Federal Trade Commission
Washington, DC 20580

Consumers Union
256 Washington Street
Mount Vernon, NY 10550

Council of Better Business Bureaus, Inc.
1150-17th Street, NW
Washington, DC 20036

Federal Reserve System (all 12 districts)
20th Street and Constitution Avenue, NW
Washington, DC 20551

Fund for Education in Economics (American Bankers Association)
1120 Connecticut Avenue, NW
Washington, DC 20036

Future Business Leaders of America
Phi Beta Lambda, Inc.
1908 Association Drive
Reston, Virginia 22091

Money Management Institute.
Household Finance Corporation
Prudential Plaza
Chicago, IL 60601

National Business Education Association
1908 Association Drive
Reston, VA 22091

National Consumer Finance Association
1000-16th Street, NW
Washington, DC 20036

National Council for the Social Studies
1201-16th Street, NW
Washington, DC 20036

National Foundation for Consumer Credit (NFCC)
1819 H Street, NW–Suite 510
Washington, DC 20006

New York Stock Exchange
11 Wall Street
New York, NY 10005

Office of Consumer Affairs
621 Reporters Building, SW
Washington, DC 20201

Office of Consumers Education
U.S. Office of Education
Department of HEW
330 Independence Avenue, SW
Washington, DC 20201

The Conference Board, Inc.
85 Third Avenue
New York, NY 10022

## Selected Periodicals and Pamphlets

*Balance Sheet, The*. South-Western Publishing Co., 5101 Madison Road, Cincinnati, OH 45227. Provides business education and economics teachers with many informative articles dealing with instructional techniques. In addition, has discussions of various issues relevant to teaching basic business and consumer education courses.

*Business Education World*. Gregg Division, McGraw-Hill Book Company, 1221 Avenue of the Americas, New York, NY 10020. Bimonthly during the school year. Focuses on teaching strategies and issues for the business education teacher. Includes articles for the consumer and basic business teacher.

*Business Exchange*. Houghton Mifflin Book Company, 1 Beacon Street, Boston, MA 02107. New periodical for the business teacher. The first issue, dated October 1978, focuses primarily on basic business topics and teaching strategies.

*Business Conditions*. Federal Reserve Bank of Chicago, Box 834, Chicago, IL 60690. Monthly. Designed to provide information to businessmen and bankers on the economic and business conditions of the nation, with particular emphasis on the Middle West.

*Changing Times*. The Kiplinger Washington Editors, Inc., 1729 H Street, NW, Washington, DC 20006. Monthly. Designed to assist consumers in making wise decisions and to provide them with sufficient information to make choices between alternatives. Classroom copies are available at special reduced rate.

*Consumer Reports*. Consumers Union of the United States, Inc., 256 Washington Street, Mount Vernon, NY 10550. Monthly. Includes articles on products tested, current consumer legislation, and analysis of various consumer issues. Classroom copies are available at special reduced rate.

*Facts and Figures on Government Finance*. Tax Foundation, inc., 50 Rockefeller Plaza, New York, NY 10020. Annual plus monthly newsletters. Invaluable source of information on government taxes and expenditures as well as the impact of taxes on individuals and businesses.

*Finance Facts*. National Consumer Finance Association, Educational Services Division, 1000-16th Street, NW, Washington, DC 20036. Monthly. On consumer financial behavior. Contains data on income, prices, employment, and so on. The association also publishes an annual fact book that provides information on population, consumer spending, and consumer income.

*Historical Chart Book*. Publications Services, Division of Administrative Services, Board of Governors of the Federal Reserve System, Washington, DC 20551. Monthly and annual. Covers major economic and financial data sets for the American economy. Charts are of sufficiently good quality to make into transparencies.

*Journal of Business Education, The*. Heldref Publications, 4000 Albemarle Street, NW., Washington, DC 20016. Monthly from October to May. By subscription only. For the business education teacher. Articles relate to all areas of business education, including consumer education and other basic business courses.

*Life Insurance Fact Book*. Institute of Life Insurance, 277 Park Avenue, New York, NY 10017. Annual. Contains data on the major types of insurance, the amount enforced, benefits, uses of insurance money, and so on. Provides students with an in-depth look at the American life insurance industry.

*Money*. Time, Inc., 541 North Fairbanks Court, Chicago, IL 60611. Monthly. Ready source for student projects and activities.

*Money Management Institute Memo*. Money Management Institute, Prudential Plaza, Chicago, IL 60601. Contains ideas and information relating to managing money that have immediate applicability in the classroom. Also includes up-date for teachers on the availability of materials.

*Road Maps of Industry*. Education Department, The Conference Board, Inc., 845 Third Avenue, New York, NY 10022. Very useful tool. Provides teachers with data relating to the level of business activity, technological change, wages, inflation, and so on. Also has charts and tables sufficiently large to make into transparencies.

*Source Book of Health Insurance Data*. Health Insurance Institute, 277 Park Avenue, New York, NY 10017. Booklet. Provides data on the extent of coverage, number of people covered, and cost of coverage as well as trends in the health insurance industry.

## Textbooks

Conover, Hobart H.; B. Bertha Wakin; and Helene L. Zimmerman. *General Business for Today's World*. Boston: Allyn and Bacon, Inc., 1977. Topics covered in this high school text include careers, economic systems, credit, communication systems, transportation and postal services, money and banking, insurance, investments, money management, government services, labor-management relations.

DeBrum, S. Joseph; Peter G. Haines; Dean R. Malsbary; and Anne Scott Daughtrey. *General Business For Economic Understanding*. 11th ed. Cincinnati: South-Western Publishing Company, 1976. Topics covered include the economy and how it works, careers, money management, banking services, credit, insurance, saving and investing, communication, transportation, government, labor and world trade. Considerable emphasis on careers throughout the entire book.

Hopkins, Charles R.; Thomas B. Duff; Robert E. Gades; and Dennis C. Lytle. *General Business in Our Modern Society*. Encino, Calif.: Glencoe Publishing Company, 1979. High school text. Book is divided into five parts including (1) The Private Enterprise Economy—Business and Government;

(2) Money, Banking and Consumer Credit; (3) Consumer Decision Making and Money Management; (4) Building Financial Security; and (5) Planning Your Career. Considerable emphasis on developing economic understanding of the roles of consumer, wage earner, and citizen. Supportive materials are available.

Jelley, Herbert M., and Robert O. Hermann. *The American Consumer: Issues and Decisions*. 2nd ed. New York: Gregg Division/McGraw-Hill Book Company, 1978. Topics covered include consumer planning and decision making, buying goods and services, housing, savings and investing, insurance, credit, taxes and government services, consumer protection, and consumer law.

Maedke, Wilmer O.; Charles C. Boardman; Ross E. Lowe; and Charles A. Malouf. *Consumer Education*. Encino, Calif.: Glencoe Publishing Company, 1979. High school text. Explains how economy functions from the consumer perspective. Also covers money management, credit, advertising, insurance. Support materials include problem-solving activities.

Morton, John S., and Ronald R. Rezny. *Consumer Action*. Boston: Houghton Mifflin Company, 1978. High school text. Covers the standard topics, but pictures, cartoons, and format make it a lively book.

Price, Ray G.; J. Curtis Hall; and Wanda B. Blackus. *Business and You as a Consumer, Writer, and Citizen*. 5th ed. New York: Gregg Division/McGraw-Hill Book Company, 1979. Topics covered include functions and organization of business, the nature of our economy, money management, buymanship, credit, saving and investing, insurance, labor, government, careers, and analysis of economic problems in the American economy. Economic concepts pervade the entire text.

Warmke, Roman F., and Eugene D. Wyllie. *Consumer Economic Problems*. 9th ed. Cincinnati: South-Western Publishing Company, 1977. High school text. Primary emphasis is on relating personal economic decision-making to the total economy. Heavy emphasis on economic principles applicable to the decision-making process.

Warmke, Roman F.; Eugene D. Wyllie; and Beulah E. Sellers. *Consumer Decision Making, Guides to Better Living*. Cincinnati: South-Western Publishing Company, 1977. Uses a personal interest approach to develop basic economic reasoning that will help the student understand our economic system and function effectively as a member of society. Special emphasis on consumer roles and the activities of spending, borrowing, and saving.

Wolf, Harold. *Managing Your Money*. Boston: Allyn and Bacon, Inc., 1977. Junior high and high school text divided into five units covering income, budgeting and wise purchasing, consumer credit and personal savings, insurance, investments, taxes, and assets. Book has quite large type.

## Supplementary Teacher Aids

*Business and Consumer Education Case Studies*. Phi Chapter, Delta Pi Epsilon, University of Minnesota, Minneapolis, Minn., 1976, 30 pp. The case studies in this booklet are primarily intended for creating class discussions and helping students acquire the ability to analyze problems and make decisions.

*Competency-Building in Consumers' Education Through Multi-Disciplinary Teacher Training*. 1978. Florida Department of Education, Knott Building, Tallahasse, FL 32204.

*A Curriculum Framework for Consumers' Education*, Teacher Education Module 1. 34 pp. Provides program orientation and a generalized curriculum framework for shaping instructional and curricular outcomes.

*A Conceptual Framework for Consumers' Education*, Teacher Education Module 2. 45 pp. Framework draws on major consumer and economic concepts and economic generalizations that help compose a core of competencies for the consumer educator.

*Implementation of Multi-Disciplinary Curriculum for Consumers' Education*, Teacher Education Module 3. 38 pp. Provides a set of experiences designed to help teachers relate the conceptual framework in Module 2 to existing school subjects.

*Evaluation in Consumers' Education*, Teacher Education Module 4. 70 pp. Provides a set of experiences designed to help teachers improve their techniques for evaluating students.

*Selected Resources for Consumers' Education*. 24 pp. A guide developed to accompany the four modules above.

*Consumer Education Skills*. Michigan Consumers Council, Lansing, Mich., 22 pp. Text includes a list of skills students should have mastered prior to high school graduation. List was approved by the Ad Hoc Committee on Consumer Education.

*Handbook for In-service Trainers in Consumer Education*. 1977. Southern Illinois University, Carbondale, Ill. 103 pp. This handbook will facilitate the training of teachers who are currently responsible for a consumer education course.

*How Will You Manage Your Money?* Continental Illinois Corporation, Chicago, Ill., 1977. A revised edition of the Family Financial Education Program developed by the Continental Corporation. Units include (1) Money—What It Is and What It Does, (2) Money Management, and (3) Wise Use of Credit. Background information, suggested teaching activities, and activity masters are included for each unit. Geared to junior high and high school levels.

## Joint Council on Economic Education

Request *Checklist*—complete catalogue of JCEE publications in print.

*A Laboratory Approach to Economic Education. A Manual for High School Teachers*. 1975. Suggests

activities and outlines methods for using field trips as a means of utilizing community resources to bring meaningful illustrations of educational concepts to the classroom. Step-by-step procedures are given for carrying out the activities. Developed by the Akron Public Schools. Revised and edited by Edward C. Prehn and George G. Dawson. 23 pp.

*Analyzing Government Regulation: A Resource Guide.* 1978. Examines the rationale for the wide variety of private and government agencies and the diversity of government regulations that affect consumers in today's marketplace. Includes instructional activities and materials for duplication and for classroom use. By John F. Bibby, Leon M. Schur, and George G. Watson, Jr.

*Analyzing Health Care Policy: A Resource Guide.* 1977. Provides background on economic and political issues involved in establishing a national policy on health care. Includes classroom activities with student readings and other instructional materials. By Laurence E. Leamer, Paul A. Smith, and Lawrence W. Bloch. 49 pp.

*Developing Economic Understanding Through General Business and Advanced Basic Business.* 1975. Consists of two books, *Course Outlines and Instructional Guides* and *Instructional Activities.* Is intended to be used as a curriculum development document in redesigning present course offerings. The course outlines were selected from three business-economics curriculum projects carried out in three school systems. Edited by Charles R. Hopkins and Ray G. Price. *Course Outlines and Instructional Guides,* 42 pp. *Instructional Activities,* 17 pp.

*Economic Education Experiences of Enterprising Teachers.* Annual. Describes the winning entries submitted in the National Awards Program for Excellence in Teaching Economics; funded by The International Paper Company Foundation.

*Economics in the Business Curriculum.* 1972. A collection of 22 articles offering insight into teaching economics within the business curriculum. Articles selected from three publications that resulted from the combined efforts of the National Business Education Association and the Joint Council. 94 pp.

*Government and the Economy:A Resource Unit for Grades 7, 8 and 9.* 1974. A collection of suggested activities (initiatory, developmental, and culminating) from which teachers can select those best suited for their own classroom use. Many are based on entries in an Awards Program for the Teaching of Economics. Also includes a listing of materials for pupil use and ideas for evaluating results. Edited by George G. Dawson. 26 pp.

*Master Curriculum Guide in Economics for the Nation's Schools.* Part I. *A Framework for Teaching Economics: Basic Concepts.* 1977. A concise statement of basic concepts and generalizations for teaching economics. Using diagrams, it summarizes the structure and substance of economics as understood and agreed to by the majority of economists and economic educators. By W. Lee Hansen, G. L. Bach, James D. Calderwood, and Phillip Saunders. 56 pp.

*Personal Economics Series.* Classroom-tested activities for use in improving consumer competence through the schools. Each publication is a self-contained teacher's guide to introducing the economics of consumer decision-making into one of three curriculums or in a self-standing course. Suitable for junior and senior high schools and adult education classes.

*Teaching Personal Economics in the Social Studies Curriculum.* 1971, 87 pp.

*Teaching Personal Economics in the Home Economics Curriculum.* 1971, 99 pp.

*Teaching Personal Economics in the Business Curriculum.* 1971, 92 pp.

*Teaching a Course in Personal Economics.* 1971, 69 pp.

*Trade-off: The Land Use Planning Game.* 1978. An economics/environmental simulation of community development and land use planning. Players attempt to form a community that is economically, environmentally, and socially healthy by buying and developing land, earning income, paying wages, and purchasing in shopping centers. A planning commission holds hearings, makes decisions, and proposes planning ordinances. The game, which is designed for secondary school age and up, teaches participants to deal with economic, political, social, and environmental concepts and factors by analyzing the costs, benefits, and trade-offs of their actions. For 9–19 players. Created by George L. Wyatt and Charlotte T. Harter.

## Bibliographies

*An Annotated Bibliography for Consumer and Homemaking Education.* 1974. Consumer-Homemaking Division, Division of Vocational and Technical Education, Department of Education, 100 North First Street, Springfield, IL, 62702. 89 pp. Materials included in this publication may be useful to secondary schools, postsecondary institutions, and adult groups. The materials, most of which are dated 1969 or later, are grouped by subject: Student References, Teacher References, and Audiovisual Materials.

*Annotated Bibliography for Personal Finance.* 1977. Center for Business and Economic Education, Georgia State University, 30 Pryor Street, Atlanta, GA 30303. 57 pp. Compiled by graduate students in consumer economic education. It is designed for teachers assigned to implement the Georgia state-mandated course in personal finance.

*Annotated Bibliography for Principles of Economics, Business, and Free Enterprise.* 1977. Center for Business and Economic Education. Georgia State University, 30 Pryor Street, Altanta, GA 30303. 38 pp. Compiled by participants in a summer workshop for teachers assigned to implement the Georgia state-mandated course in economic education.

*Audiovisual Materials for Teaching Economics*. Joint Council on Economic Education. (Request current edition.) An annotated bibliography of selected audiovisual materials in K–12 economic education. Includes a discussion of the evaluation process used by the review committee, an overview of the state of the art in audiovisual materials production, and a listing of publishers and distributors. Excellent reference for teachers, media center directors, and librarians.

*Consumer Education Resource Materials Kit*. 1976, Stewart M. Lee. Geneva College, Beaver Falls, Penn. 151 pp. Multifaceted publication. Includes material ranging from a definition of consumer education through actual projects and ending with a list of available materials.

*Educational Games and Simulations in Economics*. Joint Council on Economic Education. (Request current edition.) Includes a listing of 130 games for use at the elementary and secondary levels; articles on constructing, selecting, and using simulation games; an annotated bibliography of articles and references related to the use of games; and names and addresses of published bibliographies, journals, newsletters, distributors, and publishers.

*Sources of Information on Economic and Consumer Education*. 1976. William Rader and Stan Kmet. Economic Education Consultants of Florida, Inc., Tallahassee, Fla. 260 pp. Gives teachers, administrators, business operators, and students access to the entire scope of consumer/economic materials available in the United States.

## Miscellaneous

*Consumer Education Resource Network (CERN)*, 1500 Wilson Boulevard–Suite 800, Rosslyn, VA 22209. Funded by the Office of Consumer Education of the U.S. Office of Education, CERN is a national service network for consumer educators. Its purpose is to provide materials, information, training, and technical assistance.

*Specialized Economic Education Centers*. Among the Joint Council on Economic Education's affiliated centers are centers specializing in business and consumer education studies. For an up-to-date list, contact the Joint Council on Economic Education, College and University Division, 1212 Avenue of the Americas, New York, NY 10036.